



**USAID | JORDAN**  
FROM THE AMERICAN PEOPLE

# SITUATION ANALYSIS

## JORDAN HUMAN RESOURCE ASSESSMENT

JANUARY 2005

This publication was produced for review by the United States Agency for International Development. It was prepared by the Jordan Ministry of Health and Initiatives Inc.



## **ACKNOWLEDGEMENTS**

The work contained in this report could not have been completed without the guidance and assistance of the Human Resource Project's Technical Counterparts in the Ministry of Health, namely:

- Dr. Mohamed Al Tarawneh
- Dr. Laila Badran
- Dr. Salah Diyab
- Dr. Safa' Qusoos
- Dr. Osama Samawi

The team also extends their thanks to those in the Ministry of Health who went to considerable trouble to provide them with the data which is contained in this report, namely: Dr. Fares Da'bbabneh, Dr. Manal Jresat, and Mr. Annan Anis Mara'i.

# SITUATION ANALYSIS

## JORDAN HUMAN RESOURCE ASSESSMENT

The information contained in this report is the product of an evaluation conducted by Initiatives Inc. The report was prepared under the auspices of the Technical Assistance and Support Contract (TASC2 Global Health), implemented by Initiatives Inc. under Task Order No. GHS-I-800-03-00040-00 with the U.S. Agency for International Development.

Initiatives Inc.  
376 Boylston Street, Suite 4C  
Boston MA 02116 USA  
TEL (617) 262-0293  
FAX (617) 262-2514  
[www.initiativesinc.com](http://www.initiativesinc.com)

### **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

# CONTENTS

LIST OF ABBREVIATIONS.....	iv
DEFINITIONS.....	v
I. INTRODUCTION .....	1
1.1 THE CONTEXT FOR THE HUMAN RESOURCES PROJECT.....	1
1.2 PURPOSE OF THE HUMAN RESOURCES PROJECT.....	1
1.3 SOURCES OF DATA CONTAINED IN THIS REPORT .....	1
II. THE POPULATION OF JORDAN .....	3
III. HEALTH FACILITIES.....	4
3.1 HOSPITALS.....	4
3.2 HEALTH CENTRES.....	6
IV. STAFFING .....	8
4.1 THE CLASSIFICATION OF MOH STAFF.....	8
4.2 PRESENT STAFFING IN THE MOH.....	8
4.3 DISTRIBUTION OF PRESENT STAFF BY PLACE OF WORK.....	11
4.4 GENDER OF PRESENT MOH STAFF .....	13
4.5 DISTRIBUTION OF REGISTERED NURSES BY QUALIFICATION .....	14
4.6 NUMBER OF MOH STAFF CURRENTLY ON LONG LEAVE.....	15
4.7 ATTRITION RATES OF MOH STAFF .....	15
4.8 WORKLOAD BY STAFF MEMBER AT HEALTH CENTRES.....	18
4.9 WORKLOAD BY STAFF MEMBER AT HOSPITALS.....	20
V. EDUCATION PROGRAMS FOR HEALTH PROFESSIONS.....	22
5.1 BASIC AND POST BASIC EDUCATION .....	22
5.2. STUDENT ENTRY REQUIREMENTS.....	24
5.3 COST OF EDUCATION .....	25
5.4 STUDENT INTAKE AND GRADUATION RATES.....	25
5.5 STUDENT TEACHER RATIOS.....	27
5.6 GENDER OF STUDENTS STUDYING THE HEALTH PROFESSIONS .....	28
ANNEXES	
ANNEX 1	DETAILS OF INDIVIDUAL HOSPITALS BY DIRECTORATE
ANNEX 2	STAFF CATEGORIES USED FOR THE HUMAN RESOURCES PROJECT
ANNEX 3	SUMMARY OF STAFF-IN-POST IN NOVEMBER 2004 BY HEALTH DIRECTORATE
ANNEX 4	COST OF HEALTH PROFESSIONS EDUCATION BY INSTITUTION
ANNEX 5	EDUCATION PROGRAM INTAKES AND OUTPUTS BY COURSE AND SCHOOL
ANNEX 6	STUDENT/TEACHER RATIOS BY PROGRAM AND INSTITUTION

## TABLES

Table 1	Population by Directorate for 2004 and Projected for 2014 .....	3
Table 2	Number of Hospitals by Directorate and Sector .....	4
Table 3	Beds, Bed Occupancy Rate and In-Patient Days in 2003 for MOH Hospitals .....	5
Table 4	Number of Health Centres by Directorate and Type .....	7
Table 5	Summary of All Staff Working in the MOH by Place of Work .....	9 - 10
Table 6	Percent Distribution of Staff by Category .....	11
Table 7	Percent Distribution of Staff by Place of Work .....	12
Table 8	Gender of MOH Staff .....	13
Table 9	Qualifications of MOH Registered Nurses.....	14
Table 10	Number of MOH Staff by Profession Currently on Long Leave By Place of Work.....	16
Table 11	Leavers from MOH by Category in the Last Three Years and Attrition Rates .....	17
Table 12	Average Workload per Health Centre Staff Member per Day (GP Visits).....	18
Table 13	Average Workload per Health Centre Staff Member per Day (MCH Visits) .....	20
Table 14	Workload per Staff Member per Day at MOH Hospitals .....	21
Table 15	Education Programs for Health Professions .....	22 - 24
Table 16	Average Cost of Education for Health Professions.....	25
Table 17	National Totals of Intakes/Outputs for Health Professions Education .....	26
Table 18	Student Teacher Ratios.....	27
Table 19	Gender of Students Studying the Health Professions.....	28

## **LIST OF ABBREVIATIONS**

Admin.....	Administrator
Dr.....	Doctor
Env. Hlth.....	Environmental Health
Mgmt. ....	Management
Mgr.....	Manager
MCH.....	Maternal and Child Health Care
MOH .....	Ministry of Health
Obs/Gynae .....	Obstetrics and Gynaecology
RMS .....	Royal Medical Services
Spec. ....	Specialist
Tech.....	Technical (as in “Technical Administrator”)

## **DEFINITIONS**

### **ANCILLARY STAFF**

Types of staff that have no professional health training and whose work responsibilities support the work of the health facility. These staff include such categories as: cleaners, porters, nurse assistants/labourers, electricians, drivers, etc.

### **STAFF TURNOVER**

The percentage of staff of a particular profession or group who leave employment each year. Other words with the same meaning are: “attrition” and “staff loss rate”.

## **I. INTRODUCTION**

### **I.1 THE CONTEXT FOR THE HUMAN RESOURCES PROJECT**

Governments in most countries of the world are presently experiencing problems with the staffing of their health services.

The private health sector is growing rapidly and its demand for staff is therefore also growing. The private health sector competes with the government for qualified health staff and usually wins this competition since it can afford to pay higher salaries.

Other sectors are also growing, including financial, information technology, and tourism institutions and these industries compete with the government for school leavers, university entrants and university graduates.

Another factor making the staffing problems worse is the worldwide trend towards “professionalisation”, whereby each health profession is fighting to improve its status. Professions are trying to increase the minimum academic requirements for entry to basic training and at the same time to raise the qualification offered to graduates.

In Jordan, this is true of the pharmacy and the nursing professions. In relation to pharmacy services, there is pressure to abolish the two-year training for the Assistant Pharmacist cadre. In relation to nursing, the 9-month training programme for practical nurses has been recently abolished. The Jordanian Nursing Council and the Nursing Syndicate now want to

see the Associate Degree (2 year) Nursing programme stopped. They would like to see the 4-year Baccalaureate nursing programme as the minimum professional training requirement for nurses.

The effect of such moves, if they were to be successful, is to restrict entry into the professions, and to constrain the ability of the government health sector to employ the numbers of staff needed to meet service delivery requirements.

### **I.2 PURPOSE OF THE HUMAN RESOURCES PROJECT**

The purpose of the Human Resources Project is to help the Ministry of Health to determine the steps that need to be taken to have sufficient numbers of properly-qualified and well-motivated staff to provide essential health services to the population of Jordan.

To reach this objective, the project comprises of four main components:

*Phase 1* Assessment of the present situation of health staffing.

*Phase 2* Assessment of factors that encourage or discourage the recruitment and retention of staff within the Ministry of Health.

*Phase 3* Alternative projections of staffing needs with the associated implications for pre-service training outputs and steps to retain staff.

*Phase 4* Consolidation of all phases into a single report with recommendations for the actions

that the MOH will need to take to achieve its goals.

This report represents the completion of Phase 1.

### **IMPLICATIONS OF THE HUMAN RESOURCES PROJECT**

The results of the Human Resources Project should go a long way towards providing the basic data and suggestions upon which the MOH can make decisions.

However, given the number and the complexity of the human resource issues confronting the MOH, this project can only be seen as the first phase of the work that will be required to formulate and agree a robust and comprehensive human resource strategy for the government health sector. In addition, strong monitoring systems will need to be set in place to enable the MOH to measure progress towards its targets and to make the necessary adjustments to the strategy as the situation

Above all, senior MOH officials will need to start paying more attention to considering the future of the government health services and to making decisions about their long term vision for the provision of care. This will form the foundation upon which human resource requirements can be determined and appropriate strategies to achieve these requirements can be formulated.

### **I.3 SOURCES OF DATA CONTAINED IN THIS REPORT**

Most of the data contained in this report is taken from Ministry of Health sources. Details of which

Directorate or Department provided the data used are given under each Table.

Major sources of data included:

- the Ministry of Health personnel database maintained by the Manager of Human Resources;
- the Annual Statistical Book (2003) published on the Ministry of Health website;
- and the GP and MCH Monthly Workload reports from each health centre maintained on the Ministry of Health Local Area Network.

Training data for MOH training schools was provided by the Directorate of Manpower Development.

Training data was also obtained from the Ministry of Higher Education, the Jordan Nursing Council and relevant universities and community colleges.

It should be noted that the different sources of data referenced sometimes contained conflicting information, particularly concerning such issues as the number of health centres of each type functioning in each Directorate.

It should also be noted that some of the data held on the personnel database was also problematic. There were frequent examples of conflicting “profession” and “job title” for individual members of staff. For example, there was an individual whose profession was assistant nurse, but whose job title was Head of Department (which seems an unlikely combination).

Finally, it should be noted that whilst the Ministry has rich sources of detailed information, it is clear that this information is not regularly summarised, analysed and presented in ways that would be useful for briefing senior managers or for decision-making.

Information on health training programs, intakes and graduates to/from these programs, numbers of faculty members, and the costs to students of these programs was derived from the Ministry of Higher Education and from individual Universities.



## II. THE POPULATION OF JORDAN

Based on preliminary results from the 2004 census, the population in each Directorate is given in Table I, which indicates that the present total population is 5.32 million.

Please note that although late in 2003 there was a decision to create a new Directorate of South Agwar (by dividing Karak into two Directorates), population data is not yet formally available for South Agwar. Table I therefore only presents data for the previous 20 Directorates.

The current assumption is that the population of Jordan will grow by 2.5% each year. Using this growth rate and applying it equally to each age group and Directorate, Table I shows that in 10 years time (2014), the total population of Jordan will have increased to almost 6.4 million.

Table I: Population by Directorate for 2004 and Projected for 2014							
Region	Directorate	Estimated Population 2004			Projected Population 2014		
		Estimated Pop. > 1 year	Estimated Females 15-44	Total Pop.	Estimated Pop. > 1 year	Estimated Females 15-44	Total Pop.
Central	Capital	40,466	371,093	1,618,635	48,427	444,098	1,937,066
	East Amman	10,131	92,911	405,259	12,125	111,189	484,985
	Madaba	3386	31,053	135,446	4,052	37,162	162,092
	Zarqa	20,208	185,316	808,312	24,183	221,773	967,331
	Balqa	6,826	62,597	273,036	8,169	74,912	326,750
	Dair Alla	1,210	11,100	48,415	1,449	13,284	57,940
	South Shuneh	964	8,841	38,563	1,154	10,580	46,149
North	Irbid	14,870	136,369	594,813	17,796	163,196	711,829
	North Agwar	2,231	20,456	89,227	2,670	24,481	106,780
	Ramtha	2,699	24,755	107,975	3,230	29,625	129,217
	Al-Kura	2,361	21,649	94,428	2,825	25,908	113,005
	Bani Kenanah	1,991	18,254	79,622	2,382	21,846	95,286
	Ajlun	3,091	28,350	123,658	3,700	33,927	147,985
	Jarash	4,009	36,761	160,344	4,797	43,993	191,888
	Mafraq	2,627	24,088	105,066	3,143	28,827	125,736
	North Badiah	3,648	33,456	145,927	4,366	40,037	174,635
South	Karak <sup>/1</sup>	5,326	48,839	213,028	6,373	58,448	254,937
	Tafieleh	1,964	18,013	78,570	2,351	21,557	94,027
	Ma'an	2,418	22,172	96,709	2,893	26,534	115,735
	Aqaba	2,654	24,340	106,168	3,176	29,129	127,054
<b>NATIONAL TOTAL</b>		<b>133,080</b>	<b>1,220,413</b>	<b>5,323,200</b>	<b>159,261</b>	<b>1,460,504</b>	<b>6,370,426</b>

Sources: Preliminary results of the 2004 Population census, with age group proportions and annual population growth provided by the Department of Statistics in February 2005.

### III. HEALTH FACILITIES

#### 3.1 HOSPITALS

A summary of the present number of hospitals by sector and by

Directorate in Jordan is shown in Table 2. (Individual details of these hospitals are given in Annex I.)

Please note that the recent addition of South Agwar as a new Directorate has not been reflected in Table 2.

As shown in Table 2, there are a total of 93 hospitals in Jordan. Annex I indicates that these hospitals have a total of 9,575 beds, of which the MOH and the private sector provide 37% each, the RMS 17%, and the Universities 9%.

Table 2: Number of Hospitals by Directorate and Sector					
Directorate	Number of Hospitals				
	MOH	RMS	University	Private	Total
Capital Amman	2	3	1	37	43
East Amman	1				1
Madaba	2			1	3
Zarqa	2	1		5	8
Balqa	2			1	3
Dair Alla	1				1
South Shuneh	1				1
Irbid	3	1	1	6	11
North Agwar	2				2
Ramtha	1				1
Al-Kura	1				1
Bani Kenanah	1				1
Ajlun	1				1
Jarash	1				1
Mafraq	2				2
North Badiah	1				1
Karak	2	1		3	6
Tafieleh		1			1
Ma'an	2				2
Aqaba		1		2	3
<b>TOTAL</b>	<b>28</b>	<b>8</b>	<b>2</b>	<b>55</b>	<b>93</b>

Source: Ministry of Health Annual Statistical Book

Table 3 provides details, for MOH hospitals only, of the 2003 beds, average occupancy rate for the year, and total in-patient days.

This data has been included since in-patient days represent a key measure of workload for most hospital staff. The workload of the clinical care staff and the clerical

staff is determined largely by the number of patients in the hospital.

The workload of engineers and ancillary staff may not be so affected by the number of patients, since the hospital needs to be maintained and kept clean, regardless of the number of in-patients on the wards.

Table 3 shows that of the 28 MOH hospitals, 16 (57%) had an average bed occupancy rate in 2003 of less than 70%. Seven (25%) of the 28

MOH hospitals had an average bed occupancy of less than 60%. Three (11%) had an average bed occupancy of less than 50%, and two (7%) had less than a 20% bed occupancy.

<b>Table 3: Beds, Bed Occupancy Rate and In-Patient Days in 2003 for MOH Hospitals</b>				
<b>Directorate</b>	<b>Hospital Name</b>	<b>Beds</b>	<b>Occupancy Rate %</b>	<b>In-Patient days</b>
Amman Capital	Al Basheer	811	74.6%	219,633
	National Centre for Addiction	20	64.1%	4,677
East Amman	Dr Jameel Al-Totaji	129	65.3%	30,734
Madaba	Al-Nadeem	91	74.2%	24,653
	Princess Salma	32	18.8%	1,610
Zarqa	Al-Zarqa	298	77.9%	84,173
	Prince Faisal Bin Al-Hussein	130	83.9%	39,796
Balqa	National Centre of Psychiatry	245	64.6%	57,729
	Al-Hussein, Salt	152	75.0%	41,584
Dair Alla	Princess Eiman Ma'di	30	69.8%	7,643
South Shuneh	Al-Shouneh Al-Janoubia	39	57.0%	8,119
Irbid	Princess Basma	204	76.1%	56,669
	Princess Rahma	109	85.9%	34,181
	Princess Badea	95	79.1%	27,426
North. Agwar	Abu Obaidah	46	74.4%	12,495
	Mua'th Bin Jabal	32	66.5%	7,381
Ramtha	Al-Ramtha	56	69.9%	14,294
Al Kura	Princess Raya	60	83.1%	18,205
Bani Kenanah	Al-Yarmouk	50	50.9%	6,023
Ajlun	Al-Imam	105	60.3%	22,879
Jarash	Jarash	135	63.6%	31,319
Mafrq	Al-Mafrq (Gynae/Paediat)	102	55.2%	20,549
	Al-Mafrq	70	58.2%	20,549
North Badiah	Al-Rueshid	17	15.3%	948
Karak	Al-Karak	126	76.1%	34,186
	Ghor Al-Safi	62	74.8%	15,569
Ma'an	Ma'an	122	62.0%	27,612
	Queen Rania Al-Abdullah	69	30.6%	7,699

Source: Ministry of Health Annual Statistical Book

### 3.2 HEALTH CENTRES

Table 4 provides details of the number of health centres, by category, in each of 20 Directorates. The Table is based on 20 Directorates rather than the present 21 which includes the new Directorate of South Agwar.

For readers not familiar with the types of health centre under the Ministry of Health, the following is a brief description of their respective roles:

#### PRIMARY HEALTH CENTRE

Headed by a GP and provides both curative and preventive health services, including dental services and school health. They do food inspections and perform simple epidemiological investigations.

#### COMPREHENSIVE HEALTH CENTRE

In addition to the services provided by the primary health centres, the comprehensive health centre also provides specialty care in the areas of paediatrics, gynaecology, internal medicine,

orthopaedics, ENT, ophthalmology, dermatology and dentistry.

#### VILLAGE HEALTH CENTRE

Originally intended to provide health promotion in villages and to maintain simple information about births, deaths, etc. Their actual functions are presently not in line with the original intention. GPs will visit to attend to patients.

The average population served by each comprehensive, primary and MCH centre is 13,146. The Directorate with the highest number of health centres for its population is North Badiah, followed closely by Bani Kenaneh and Karak, where there is one centre for less than 5,000 people.

Capital Amman, Zarqa and Irbid, the most highly populated Directorates, show the highest number of people served, on average, by each government comprehensive, primary and MCH centre. Due to their population size, these Directorates would be expected to attract higher numbers of private health care providers and therefore their

populations would be expected not to have to rely solely on the government for their health care provision.

Outside of these major population centres, the number of people served by each health centre varies from a low of 4,473 in North Badiah to a high of 11,151 in Aqaba.

When the village health centres are included in the calculations, then the national average number of people served by each health centre is 8,075.

Looking at individual Directorates, the number of clients served by the total number of comprehensive + primary + village health centres + stand-alone MCH units ranges from 2,169 in North Badiah to 20,764 in Madaba (excluding Amman Capital as a special case).

16 of the 20 Directorates (80%) fall below the national average (their health centres serve less than 8,075 people).

Table 4: Number of Health Centres by Directorate and Type										
Region Directorate	Total	Population	Number of Health Centres							
			Comp. (A)	Primary (B)	MCH (C)	Total (A+B+C)	Pop. per H/C	Village (D)	Total (A+B+C+D)	Pop. Per H/C
Central	1. Capital	1,793,007	10	35	2	46	38,978	12	58	30,914
	2. East Amman	316,217	4	23	0	27	11,712	25	52	6,081
	3. Madaba	143,130	2	11	1	14	10,224	15	29	4,936
	4. Zarqa	872,094	5	24	1	30	29,070	12	42	20,764
	5. Balqa	262,405	3	23	2	28	9,372	17	45	5,831
	6. Dair Alla	56,031	0	8	1	9	6,226	8	17	3,296
	7. South Shuneh	43,827	0	7	0	7	6,261	5	12	3,652
North	8. Irbid	610,244	5	46	2	53	11,514	16	69	8,844
	9. North Agwar	98,749	0	9	1	10	9,875	5	15	6,583
	10. Ramtha	105,406	0	10	0	10	10,541	0	10	10,541
	11. Al-Kura	94,865	0	13	0	13	7,297	1	14	6,776
	12. Bani Kenanah	82,660	1	16	0	17	4,862	4	21	3,936
	13. Ajlun	122,604	2	13	0	15	8,174	12	27	4,541
	14. Jarash	161,992	0	18	0	18	9,000	8	26	6,230
	15. Mafraq	188,066	4	20	0	24	7,836	31	55	3,419
	16. North Badiah	71,565	3	13	0	16	4,473	17	33	2,169
South	17. Karak <sup>/1</sup>	222,462	5	37	3	45	4,944	35	80	2,781
	18. Tafieleh	83,770	3	9	0	12	6,981	10	22	3,808
	19. Ma'an	107,070	3	15	0	18	5,948	23	41	2,611
	20. Aqaba	111,508	3	7	0	10	11,151	9	19	5,869
<b>NATIONAL TOTAL</b>		<b>5,547,672</b>	<b>53</b>	<b>356</b>	<b>13</b>	<b>422</b>	<b>13,146</b>	<b>265</b>	<b>687</b>	<b>8,075</b>

## **IV. STAFFING**

### **4.1 THE CLASSIFICATION OF MOH STAFF**

The MOH uses a dual classification for its staff: it classifies staff by profession (such as specialist doctor, registered nurses, clerk, etc.); and each staff member is also classified by job title (such as Head of Health Centre, staff nurse, male secretary, etc.) Within the MOH personnel database, a total of 145 professions are in use and 950 job titles.

For this Project, it was necessary to simplify the classification of staff into a smaller number of categories that could be meaningfully analysed and easily understood. The classification of staff used for the Human Resources Project is given in Annex 2. Annex 2 shows how the MOH “professions” and “job titles” were grouped within each of the categories. Throughout this report, all staffing data is presented using these categories.

It should be noted that the category “Senior Managers” includes all MOH staff which have the job title of Director or a more senior position, regardless of their professional status. The category “Senior Managers” therefore includes staff who may be specialist doctors, qualified medical residents, or pharmacists. Regardless of their professional qualifications and status, “Senior Managers” are primarily responsible for management rather than the provision of clinical services to clients/patients and are therefore classified as “Management and Administration” staff.

### **4.2 PRESENT STAFFING IN THE MOH**

A summary of the total staff working for the Ministry of Health in November 2004 is shown in Table 5. Table 5 presents the present staff both by staff category and by place of work (including the central MOH, special, central MOH units, national hospital, health directorates, other MOH hospitals and health centres). Details of the MOH staff in each health directorate, including the distribution of staff by type of health centre, are included in Annex 3.

**Table 5: Summary of All Staff Working for the Ministry of Health by Place of Work**

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Central MOH <sup>1</sup>		Central Special Units <sup>2</sup>		National Hospitals <sup>3</sup>		Health Directorate		Other Hospitals <sup>4</sup>		Health Centers <sup>5</sup>		Total All Staff		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Doctors	Specialist – Obs/Gyn	0	0			20	13	4	0	102	16	6	4	132	33	165
	Specialist – Fam.Med	3	1					5	1			17	22	25	24	49
	Specialist – Other	22	6	5		228	29	24	0	577	29	40	15	896	79	975
	<b>Sub-Tot: Specialists</b>	<b>25</b>	<b>7</b>	<b>5</b>	<b>0</b>	<b>248</b>	<b>42</b>	<b>33</b>	<b>1</b>	<b>679</b>	<b>45</b>	<b>63</b>	<b>41</b>	<b>1,053</b>	<b>136</b>	<b>1,189</b>
	Qual.Med Resident	3	1			44	11	6	0	221	10	25	9	299	31	330
	Med Res -Obs/Gyn	0	0			10	18	1	0	29	15	0	0	40	33	73
	Med Res -Fam.Med	0	0			4	4	0	0	5	2	5	1	14	7	21
	Med Res –Others	31	19			178	16	20	0	219	26	19	5	467	66	533
	<b>Sub-Tot: Med. Res.</b>	<b>34</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>236</b>	<b>49</b>	<b>27</b>	<b>0</b>	<b>474</b>	<b>53</b>	<b>49</b>	<b>15</b>	<b>820</b>	<b>137</b>	<b>957</b>
	GP	12	4	3	1	14	4	61	10	186	15	621	135	897	169	1,066
	<b>TOTAL DOCTORS</b>	<b>71</b>	<b>31</b>	<b>8</b>	<b>1</b>	<b>498</b>	<b>95</b>	<b>121</b>	<b>11</b>	<b>1,339</b>	<b>113</b>	<b>733</b>	<b>191</b>	<b>2,770</b>	<b>442</b>	<b>3,212</b>
Dental Doctors	Dental Surgeon	0	0	1		9		4	0	27	1	17	4	58	5	63
	Dentist	3	2			1	6	5	14	15	4	204	186	228	212	440
	Qual.Dental Res.	0	0					0	0	0	0	0	1	0	1	1
	Dental Resident	0	0			6	5	0	0	2	0	4	0	12	5	17
	<b>TOTAL DENTISTS</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>16</b>	<b>11</b>	<b>9</b>	<b>14</b>	<b>44</b>	<b>5</b>	<b>225</b>	<b>191</b>	<b>298</b>	<b>223</b>	<b>521</b>
Nurses	Registered Nurse	5	11	24	32	232	268	13	41	545	935	32	98	851	1,385	2,236
	Associate Nurse	1	1	8	3	84	89	1	6	104	260	8	5	206	364	570
	Associate Midwife		6		8		58	0	95	0	399		394	0	960	960
	Asst Nurse	6	5	7	4	91	212	45	153	325	899	191	903	665	2,176	2,841
	<b>TOTAL NURSES</b>	<b>12</b>	<b>23</b>	<b>39</b>	<b>47</b>	<b>407</b>	<b>627</b>	<b>59</b>	<b>295</b>	<b>974</b>	<b>2,493</b>	<b>231</b>	<b>1,400</b>	<b>1,722</b>	<b>4,885</b>	<b>6,607</b>
Pharmacy Staff	Pharmacist	14	46	4	5	4	20	13	34	18	41	4	17	57	163	220
	Asst. Pharmacist	42	18	7	3	34	34	66	62	125	103	281	234	555	454	1,009
	<b>TOTAL PHARM.</b>	<b>56</b>	<b>64</b>	<b>11</b>	<b>8</b>	<b>38</b>	<b>54</b>	<b>79</b>	<b>96</b>	<b>143</b>	<b>144</b>	<b>285</b>	<b>251</b>	<b>612</b>	<b>617</b>	<b>1,229</b>

Table 5: Summary of All Staff Working for the Ministry of Health by Place of Work (continued)																
Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Central MOH <sup>1</sup>		Central Special Units <sup>2</sup>		National Hospitals <sup>3</sup>		Health Direct-orate		Other Hospitals <sup>4</sup>		Health Centers <sup>5</sup>		Total All Staff		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Laboratory Staff	Laboratory Tech.	16	33	9	14	7	12	9	12	43	42	3	6	87	119	206
	Asst. Lab.Tech.	13	27	39	30	26	25	51	70	176	83	82	104	387	339	726
	<b>TOTAL LAB.</b>	<b>29</b>	<b>60</b>	<b>48</b>	<b>44</b>	<b>33</b>	<b>37</b>	<b>60</b>	<b>82</b>	<b>219</b>	<b>125</b>	<b>85</b>	<b>110</b>	<b>474</b>	<b>458</b>	<b>932</b>
Other Techs.	X-Ray Technician	5	2	3		51	26	20	5	195	43	45	13	319	89	408
	Other Technicians	23	29	9	3	78	72	55	38	277	112	54	76	496	330	826
Env'l Health	Env'al Health Staff	161	15	4	2	3	3	274	37	25	7	208	18	675	82	757
Engineer	Engineer	71	16	1	4	11	4	24	12	52	15	2		161	51	212
Teacher	Teacher			8	23			0	0					8	23	31
Mgmt. & Admin. Staff	Senior Manager	41	12	1		4		18	0	25	0			89	12	101
	Mid-Level Manager	78	74	7	3	26	5	98	18	72	36			281	136	417
	1st Level Manager	4	5	1		2	1	33	2	10	13			50	21	71
	Tech. Administrator	108	74	3	8	37	21	64	84	127	84	155	191	494	462	956
	Clerical	102	270	12	22	36	100	121	319	133	297	158	416	562	1,424	1,986
	<b>TOTAL ADMIN</b>	<b>333</b>	<b>435</b>	<b>24</b>	<b>33</b>	<b>105</b>	<b>127</b>	<b>334</b>	<b>423</b>	<b>367</b>	<b>430</b>	<b>313</b>	<b>607</b>	<b>1,476</b>	<b>2,055</b>	<b>3,531</b>
Ancillary	Ancillary Staff	541	75	72	26	122	58	761	265	756	273	1,115	1,604	3,367	2,301	5668
<b>TOTAL STAFF</b>		<b>1,305</b>	<b>752</b>	<b>228</b>	<b>191</b>	<b>1,362</b>	<b>1,114</b>	<b>1,796</b>	<b>1,278</b>	<b>4,391</b>	<b>3,761</b>	<b>3,296</b>	<b>4,461</b>	<b>12,378</b>	<b>11,556</b>	<b>23,934</b>

Notes:

1. "Central MOH" includes all staff working in units managed by the centre, except those which have been included under "Central Special Units" described in note 2 below. As of November, 2004, the staff that have now been seconded from the MOH to form the new Food & Drug Administration Organisation are still included under the Central MOH.
2. "Central Special Units" include: Central Drug Control Laboratory, National Blood Bank in Amman, the Addiction Treatment Centre, Psychology Preparation Centre, Rufaidah Al-Islamia Nursing College in Yajouz, Nossabab Nursing College in Irbid, the Medical Professions Institute in Irbid, the Medical Professions Institute in Yajouz, and the Teachers Training Institute in Amman.
3. "National Hospitals" include: Al Basheer Hospital and the National Psychiatric Centre. Al Basheer is the largest hospital in the country and can skew the staffing picture of other of the other government hospitals. Al Basheer also acts as a national referral hospital as is the case with the National Psychiatric Centre.
4. "Other Hospitals" includes all government hospitals in the country except for Al Basheer and the National Psychiatric Centre
5. "Health Centres" includes all government comprehensive, primary and village health centres and MCH unit



Table 6 shows the percentage distribution of current staff (as shown in Table 5) by category.

Of the total MOH staff in November 2004, almost 13.5% are doctors (of all types, including residents). 27.6% are nurses, but of these, only 15.7% are qualified (are registered nurses, associate nurses or midwives).

Almost 15% of all staff are in the management and administration category and almost 24% are ancillary.

<b>Table 6: Percent Distribution of Staff by Category</b>	
Staff Category	Percent
Medical Specialists	4.97%
GPs	4.45%
All Doctors	13.42%
Dental Specialists	0.26%
Dentists	1.84%
Registered Nurses	9.34%
Midwives	4.01%
Assistant Nurses	11.87%
All Nurses	27.61%
Pharmacy Staff	5.13%
Laboratory Staff	3.89%
Admin. Staff	14.75%
Ancillary	23.68%
Other Staff	9.42%
<b>TOTAL</b>	<b>100%</b>

### 4.3 DISTRIBUTION OF PRESENT STAFF BY PLACE OF WORK

Table 7 shows the distribution of current staff of each category by place of work.

Of the almost 24,000 total MOH staff, 9% (2,057) are working in the

central Ministry of Health. (It is to be noted that “Central Ministry of Health” excludes the special units under the MOH which are providing services to patients, managing the blood supply and providing basic education for the health professions.) In comparison with some other countries for which data are available, 9% is very high. For example, in Zimbabwe in 2000, where the MOH employed a total of 22,000 staff for a population of almost 11 million, only 330 staff (1.5%) were working at the central MOH.

Again in relation to the total staff of the MOH, 44% are working in hospitals, 13% at the Health Directorates and 32% at health centres.

This distribution is followed quite closely when individual staff categories are examined.

Of the total doctors of all types working for the MOH, 64% are working in hospitals, 29% in health centres and 7% in management positions at the central MOH and health directorates.

For GPs, 71% are working in health centres and 21% in hospitals.

In relation to nurses, there is clearly a problem in deploying the more highly qualified nurses (the registered nurses) to health centres. Only 5.8% of all registered nurses in the MOH are working at health centres, whilst 87% of them are working at hospitals. A similar problem is shown in relation to the Associate Nurses, of which 84% are based in hospitals and only 2.3% in health centres. For midwives, there is a better balance, since there are 48% of them working in hospitals and 41% in health centres. For assistant

nurses, 56% of them are working in hospitals and 36% in health centres.

For pharmacists, a surprising 27% are working in the central MOH. 22% of pharmacists are working in health directorate offices, 38% are working in hospitals and 10% at health centres. Pharmacy services at the health centres are largely carried out by the assistant pharmacists, of which 51% are working at health centres and 34% at hospitals.

24% of all MOH laboratory technicians are working at the central MOH offices, 51% are working at hospitals and 4% at health centres. Their less qualified associates – the assistant laboratory technicians – show that 43% are working at hospitals and 26% at health centres.

There are a total of 956 “technical administrators” working for the MOH, most of which are accountants. 36% of these staff are working at health centres, 28% are working at hospitals, 19% at the central MOH (where the category also includes lawyers, journalists and computer programmers), and 16% at health directorates.

Finally, in relation to ancillary staff, 48% of the total are working at health centres. 22% of them are working at hospitals, but it needs to be noted that Al-Basheer hospitals employs very few ancillary staff since many of this hospital’s “hotel” services are contracted out. 11% of all ancillary staff are working at the central MOH and a further 18% at the health directorates.

Table 7: Percent Distribution of Staff By Place of Work							
Staff Category	Central MOH	Special Units	National Hospitals	Health Direct.	Other Hosp	H/Cs	Total
Specialist Dr - Obs/Gyn	0.0%	0.0%	20.0%	2.4%	71.5%	6.1%	100.0%
Specialist Dr - Family Med.	10.3%	0.0%	0.0%	15.4%	0.0%	74.4%	100.0%
Specialist Dr - Other	2.9%	0.5%	26.4%	2.5%	62.2%	5.6%	100.0%
<b>Sub-Total: Specialists</b>	<b>2.7%</b>	<b>0.4%</b>	<b>24.6%</b>	<b>2.9%</b>	<b>61.4%</b>	<b>8.0%</b>	<b>100.0%</b>
Qualified Med Resident	1.2%	0.0%	16.7%	1.8%	70.0%	10.3%	100.0%
Med Res - Obs/Gyn	0.0%	0.0%	38.4%	1.4%	60.3%	0.0%	100.0%
Med Res - Family Med	0.0%	0.0%	38.1%	0.0%	33.3%	28.6%	100.0%
Med Res – Others	9.4%	0.0%	36.4%	3.8%	46.0%	4.5%	100.0%
<b>Sub-Total: Med. Res.</b>	<b>5.6%</b>	<b>0.0%</b>	<b>29.8%</b>	<b>2.8%</b>	<b>55.1%</b>	<b>6.7%</b>	<b>100.0%</b>
GP	1.5%	0.4%	1.7%	6.7%	18.9%	70.9%	100.0%
<b>TOTAL DOCTORS</b>	<b>3.2%</b>	<b>0.3%</b>	<b>18.2%</b>	<b>4.1%</b>	<b>45.3%</b>	<b>28.9%</b>	<b>100.0%</b>
Dental Surgeon	0.0%	1.6%	14.3%	6.3%	44.4%	33.3%	100.0%
Dentist	1.1%	0.0%	1.6%	4.3%	4.3%	88.6%	100.0%
Qual. Dental Resident	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Dental Resident	0.0%	0.0%	64.7%	0.0%	11.8%	23.5%	100.0%
<b>TOTAL DENTISTS</b>	<b>1.0%</b>	<b>0.2%</b>	<b>5.2%</b>	<b>4.4%</b>	<b>9.4%</b>	<b>79.8%</b>	<b>100.0%</b>
Registered Nurse	0.7%	2.5%	22.4%	2.4%	66.2%	5.8%	100.0%
Associate Nurse	0.4%	1.9%	30.4%	1.2%	63.9%	2.3%	100.0%
Associate Midwife	0.6%	0.8%	6.0%	9.9%	41.6%	41.0%	100.0%
Asst. Nurse	0.4%	0.4%	11.1%	7.2%	44.7%	36.3%	100.0%
<b>TOTAL NURSES</b>	<b>0.5%</b>	<b>1.4%</b>	<b>15.9%</b>	<b>5.4%</b>	<b>53.3%</b>	<b>23.5%</b>	<b>100.0%</b>
Pharmacist	27.1%	4.1%	10.9%	21.7%	26.7%	9.5%	100.0%
Asst. Pharmacist	5.9%	1.0%	6.7%	12.7%	22.6%	51.0%	100.0%
<b>TOTAL PHARMACY</b>	<b>9.8%</b>	<b>1.5%</b>	<b>7.5%</b>	<b>14.3%</b>	<b>23.3%</b>	<b>43.6%</b>	<b>100.0%</b>
Laboratory Tech.	23.8%	11.2%	9.2%	10.2%	41.3%	4.4%	100.0%
Asst. Lab. Tech.	5.5%	9.5%	7.0%	16.7%	35.7%	25.6%	100.0%
<b>TOTAL LAB.</b>	<b>9.5%</b>	<b>9.9%</b>	<b>7.5%</b>	<b>15.2%</b>	<b>36.9%</b>	<b>20.9%</b>	<b>100.0%</b>
X-Ray Technician	1.9%	0.8%	20.4%	6.6%	55.0%	15.3%	100.0%
Other Technicians	6.3%	1.5%	18.2%	11.3%	47.1%	15.7%	100.0%
Env'al Health Staff	19.1%	0.7%	0.7%	33.8%	3.5%	42.3%	100.0%
Engineers	41.0%	2.4%	7.1%	17.0%	31.6%	0.9%	100.0%
Teachers	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Senior Managers	52.5%	1.0%	4.0%	17.8%	24.8%	0.0%	100.0%
Mid-Level Managers	36.5%	2.4%	7.4%	27.8%	25.9%	0.0%	100.0%
1st Level Managers	12.7%	1.4%	4.2%	49.3%	32.4%	0.0%	100.0%
Tech. Administrators	19.0%	1.2%	6.1%	15.5%	22.1%	36.2%	100.0%
Clerical	18.7%	1.7%	6.8%	22.2%	21.7%	28.9%	100.0%
<b>TOTAL ADMIN. STAFF</b>	<b>23.3%</b>	<b>1.7%</b>	<b>0.0%</b>	<b>22.9%</b>	<b>24.2%</b>	<b>27.9%</b>	<b>100.0%</b>
Ancillary Staff	10.9%	1.7%	3.2%	18.1%	18.2%	48.0%	100.0%
<b>TOTAL</b>	<b>8.6%</b>	<b>1.8%</b>	<b>10.3%</b>	<b>12.8%</b>	<b>34.1%</b>	<b>32.4%</b>	<b>100.0%</b>

#### 4.4 GENDER OF PRESENT MOH STAFF

Table 8 shows, for each category of staff, the percentage distributions by gender.

Across all staff, the gender distribution is quite equal, with 52% male and 48% female. 74% of all the nurses and 72% of all the clerical staff are female, which is to be expected.

If the unqualified staff (ancillary cadres and assistant nurses), the clerical staff and all qualified nurses and midwives are excluded, then females represent 31% of the MOH workforce.

In relation to management, males are filling 80% of the senior (Director or higher) positions. For all the management positions (senior, mid-level and first level), the gender balance is still 71% male and 29% female.

In relation to doctors, only 11.4% of all specialists are female. This situation is likely to continue in the near future, as only 14.3% of the current residents are female.

Females represent only 16% of general practitioners and only 14% of all doctors.

Perhaps the area of most concern is that of the Obstetrics and Gynaecology Specialists, where only 20% (one-fifth) are female.

Almost three quarters of the pharmacists in the MOH are female. Females also form the majority of the qualified nursing cadres. Midwifery is restricted to females.

<b>Table 8: Gender of MOH Staff</b>		
Staff Category	% Male	% Female
Specialist Dr - Obs/Gyn	80.0	20.0
Specialist Dr – Fam. Med.	51.0	49.0
Specialist Dr - Other	91.9	8.1
Sub-Total: Specialists	88.6	11.4
Qualified Med Resident	90.6	9.4
Med Res - Obs/Gyn	54.8	45.2
Med Res - Family Med	66.7	33.3
Med Res – Others	87.6	12.4
Sub-Total: Med. Res.	85.7	14.3
GP	84.1	15.9
<b>TOTAL DOCTORS</b>	<b>86.2</b>	<b>13.8</b>
Dental Surgeon	92.1	7.9
Dentist	51.8	48.2
Qual. Dental Resident	0	100.0
Dental Resident	70.6	29.4
<b>TOTAL DENTISTS</b>	<b>57.2</b>	<b>42.8</b>
Registered Nurse	38.1	61.9
Associate Nurse	36.1	63.9
Associate Midwife	0	100.0
Asst. Nurse	23.4	76.6
<b>TOTAL NURSES</b>	<b>26.1</b>	<b>73.9</b>
Pharmacist	74.1	25.9
Asst. Pharmacist	55.0	45.0
<b>TOTAL PHARMACY</b>	<b>49.8</b>	<b>50.2</b>
Laboratory Tech.	42.2	57.8
Asst. Lab. Tech.	53.3	46.7
<b>TOTAL LAB.</b>	<b>50.9</b>	<b>49.1</b>
X-Ray Technician	78.2	21.8
Other Technicians	60.0	40.0
Env'l Health Staff	89.2	10.8
Engineers	75.9	24.1
Teachers	25.8	74.2
Senior Managers	88.1	11.9
Mid-Level Managers	67.4	32.6
1st Level Managers	70.4	29.6
Tech. Administrators	51.7	48.3
Clerical	28.3	71.7
<b>TOTAL ADMIN. STAFF</b>	<b>41.8</b>	<b>58.2</b>
Ancillary Staff	59.4	40.6
<b>TOTAL</b>	<b>51.7</b>	<b>48.3</b>

#### 4.5 DISTRIBUTION OF REGISTERED NURSES BY QUALIFICATION

The Ministry of Health classifies all nurses who have Masters' degrees, baccalaureate degrees or the previously awarded 3-year registered nurse diploma as "Registered Nurses".

The issue of nursing education continues to be hotly debated in Jordan. Those who were trained under the 3-year registered nurse diploma claim that the baccalaureate graduates leave their training with considerable knowledge but inadequate practical experience and skills.

Whatever the truth of this perception, the pressure for raising the qualifications (and therefore the perceived status) of nurses is continuing.

An issue currently on the agenda of the nursing profession is whether the Associate Degree Nurse cadre (trained for two years) should be abolished so that the minimum educational level of nurses would be a baccalaureate degree. Experiences elsewhere in the world may provide Jordan with some issues to consider as decisions are made on this matter.

It has been found in many other countries that nurses trained to baccalaureate level have a strong

reluctance to work at the health centre level, since this is perceived to be of lower status than hospital nursing and further from the centre of power. Countries that have abolished the lower levels of nurse training (such as Jordan's Associate Nurse program) have found that services for the majority of the population provided through the health centres have been severely affected by a shortage of nurses.

To explore this issue, Table 9 provides details of the distribution of registered nurses within the MOH according to their level of professional education.

<b>Place of Work</b>	<b>Masters' Degree</b>	<b>Baccalaureate Degree</b>	<b>3-Year RN Diploma</b>	<b>Nurse with 1-Year Specialist Diploma</b>	<b>All Qualifications</b>
Central MOH	24 (53%)	28 (3%)	54 (4%)	1 (20%)	107 (5%)
Health Directorate	1 (2%)	69 (8%)	32 (2%)		102 (4%)
Hospital	17 (38%)	714 (86%)	1,264 (87%)	4 (80%)	1,999 (86%)
Comprehensive H/C	2 (4%)	12 (1%)	45 (3%)		59 (3%)
Primary H/C	1 (2%)	11 (1%)	56 (4%)		68 (3%)
MCH Centre			2 (0.1%)		2 (0.1%)
Village H/C			1 (0.1%)		1 (0.04%)
<b>Sub-Total: H/Cs</b>	<b>3 (7%)</b>	<b>23 (3%)</b>	<b>104 (7%)</b>	<b>0</b>	<b>130 (6%)</b>
<b>TOTAL ALL WORKPLACES</b>	<b>45 (100%)</b>	<b>834 (100%)</b>	<b>1,454 (100%)</b>	<b>5 (100%)</b>	<b>2,338 (100%)</b>

The MOH currently employs 45 nurses with Masters Degrees, of which 53% are working at training institutions under the central MOH and 38% are working in hospitals. Only 3 (7%) are working at health centres, as is to be expected since a Masters Degree education is hardly needed at the health centre service delivery level.

Nurses who have gained a specialised one-year diploma are working only in hospitals and at the central MOH. Again, this is to be expected due to the need for their special skills.

More worrying is that only 3% of the baccalaureate degree nurses are working at the health centre level. In fact, only 6% of registered nurses, with all levels of professional education, are working at health centres.

Clearly, since most of the associate degree nurses are working in hospitals (see Table 7 that shows that only 2.3% of this category are working in health centres), this means that the majority of the health centre nursing services for general patients are provided by unqualified (and largely untrained) assistant nurses.

#### 4.6 NUMBER OF MOH STAFF CURRENTLY ON LONG LEAVE

Table 10 examines the number of MOH staff who are currently absent from work for the reasons that are defined by the MOH personnel database, namely:

- they are on unpaid leave (usually this means working elsewhere, usually in the Gulf States)

- they have been seconded by the MOH to work for another agency
- they are on Government-sponsored study leave
- they are on personally sponsored study leave
- they are on other leave (unspecified)

Table 10 shows that the highest proportions of the following categories of MOH staff are currently absent:

193 (16%) of the present 1,189 specialist doctors are presently absent from work, of which the majority are on unpaid leave (presumably working in other countries).

268 (12%) of the present 2,236 registered nurses are presently absent from work. Again, the majority of these are on unpaid leave.

88 (40%) of the present 220 pharmacists are presently absent from work, but most of these (52) have been seconded by the MOH to work for another organisation, and many of these have been seconded to the newly independent Food and Drug Administration.

150 (18%) of "other technicians" are presently absent from work, of which 89 are on unpaid leave and a further 45 have been seconded by the MOH to work for other agencies.

55 (26%) of the present 212 engineers are currently working elsewhere, with almost equal proportions on unpaid leave or

having been seconded by the MOH.

#### 4.7 ATTRITION RATES OF MOH STAFF

Table 11 examines the number of MOH staff in each category who have left the MOH in each of the last three years. Reasons for leaving are not comprehensively identified or recorded.

Unfortunately, the personnel database in the MOH is updated as changes occur and previous information is over-written with the new changes. Hence it was not possible to determine the number of staff employed in the previous two years (2003 and 2002), and the calculation of attrition rate had to assume that in each of these two years the total number of staff was the same as in 2004.

Attrition is important because if the MOH workforce is to be maintained at its current level, then the MOH must attract sufficient new recruits with the necessary qualifications to replace those that leave.

As shown in Table 11, the attrition rate across all categories of staff is quite low at 4.6% per annum.

Categories which have shown a higher rate of attrition than the average are as follows:

The highest rate of loss is shown by the laboratory technicians, where the average annual attrition over the last three years has been 15.5%. This equates to a loss of 32 laboratory technicians each year given the present number employed by the MOH.

**Table 10: Number of MOH Staff by Profession Currently on Long Leave by Place of Work**

	Central MOH						Health Directorate						Hospital						H/C (including MCH)						Total					
	Unpaid Leave	Seconded	Gov't Study Leave	Persona. Study Leave	Other Leave	Total	Unpaid Leave	Seconded	Gov't Study Leave	Persona. Study Leave	Other Leave	Total	Unpaid Leave	Seconded	Gov't Study Leave	Persona. Study Leave	Other Leave	Total	Unpaid Leave	Seconded	Gov't Study Leave	Persona. Study Leave	Other Leave	Total	Unpaid Leave	Seconded	Gov't Study Leave	Persona. Study Leave	Other Leave	Total
Spec. Dr-Obs/Gyn						0						0	2	1				3						0	2	1	0	0	0	0
Spec. Dr-Fam. Med.	2					2	1					1						0	9				2	11	12	0	0	0	2	2
Spec. Dr-Other	11	9				20	5	12		1		18	116	1	1	7	10	135	11			2	3	133	22	1	8	12	12	
Qual. Med. Res.	4	1			2	7						0	9			1	2	12					0	13	1	0	1	4	4	
Med. Res.-Obs/Gyn						0						0	1					1					0	1	0	0	0	0	0	
Med. Res.-Fam. Med.						0						0						0					0	0	0	0	0	0	0	
Med. Res.-Other	4	1		1		6	1					1	2			1	3	6	1		1		2	8	1	1	2	3	3	
GP	1					1	4	1			11	7	3					3	16	1			5	22	24	2	0	1	6	6
Sub-Total	22	11	0	1		36	11	13	0	2	1	27	133	2	1	9	15	16	27	1	1	0	9	38	19	27	2	12	27	27
Dental Surgeon						0	1					1	3					3	2				2	6	0	0	0	0	0	
Dentist	1					1	3				3	6	1				1	2	9	1		6	16	32	14	1	0	6	20	20
Qual. Dental Res.						0						0						0					0	0	0	0	0	0	0	
Dental Resident						0						0						0					0	0	0	0	0	0	0	
Sub-Total	1	0	0	0	2	1	4	0	0	0	3	7	4	0	0	0	1	5	11	1	0	6	1	34	20	1	0	6	20	20
Reg. Nurse	17	1		1	2	21	3				1	4	175	7	1	1	44	228	13		1		1	15	20	8	2	2	48	48
Midwife			1		1	2					1	1	5			1	8	14	1	1		1	8	11	6	1	1	2	18	18
Assoc. Nurse						0						0	8	1			1	10					1	8	1	0	0	2	2	
Assist. Nurse	1					1	4				4	8	55	2		2	14	73	11	3		1	7	22	11	3	0	1	25	25
Sub-Total	18	1	1	1	3	24	7	0	0	0	6	13	243	10	1	4	67	325	25	4	1	2	1	49	29	15	3	7	93	93
Pharmacist	12	52	2		7	73	1				3	4	1				8	9				2	2	14	52	2	0	20	20	
Asst. Pharmacist	1	21			2	24					4	4	6				5	11	3			14	17	10	21	0	0	25	25	
Sub-Total	13	73	2	0	9	97	1	0	0	0	7	8	7	0	0	0	13	20	3	0	0	0	16	19	24	73	2	0	45	45
Lab. Tech	4	10			5	19						0	10				3	13				5	5	14	10	0	0	13	13	
Asst. Lab. Tech						0						0					1	1					0	0	0	0	0	1	1	
Sub-Total	4	10	0	0	5	19	0	0	0	0	0	0	10	0	0	0	4	14	0	0	0	5	5	14	10	0	0	14	14	
X-Ray Staff	1			1		2						0	14			2	2	18	2			1	3	17	0	0	3	3	3	
Other Tech	9	39			2	50	5	2		1	2	10	66	4		2	6	78	9			3	12	89	45	0	3	13	13	
Env'l Health Staff	4	1		1		6						0	1				1	2	1				1	6	1	0	1	0		
Engineers	18	26			3	47	1					1	5				2	7					0	24	26	0	0	5	5	
Teachers						0						0						0					0	0	0	0	0	0	0	
Sr. Mgr						0						0						0					0	0	0	0	0	0	0	
Mid-Level Mgr	2	3				5						0	3					3					0	5	3	0	0	0	0	
1 <sup>st</sup> Level Mgr						0						0						0					0	0	0	0	0	0	0	
Tech Adminst.	4	5			3	12	1				2	3		1				1					0	5	6	0	0	0	5	
Clerical	5	42		1	18	66	2	1			10	13	6	2			13	21		2			8	10	13	47	0	1	49	49
Sub-Total	11	50	0	1	21	83	3	1	0	0	12	16	9	3	0	0	13	25	0	2	0	0	8	10	23	56	0	1	54	54
Ancillary Staff	4	48		1	5	58	2	1			4	7	1	1			3	5	3	1			5	9	10	51	0	1	17	17
TOTAL	105	259	3	6	50	423	34	17	0	3	35	89	493	20	2	17	127	639	81	9	2	8	80	180	713	305	7	34	292	292

**Table 11: Leavers from MOH by Category in the Last Three Years and Attrition Rates**

Profession	Leavers 2002						Leavers 2003						Leavers 2004						In-Post 2004	Average Turnover Rate for Last 3 Years
	Retired	Pre-Retirement	Resigned	Other reasons	Total	2002 Attrition	Retired	Pre-Retirement	Resigned	Other reasons	Total	2003 Attrition	Retired	Pre-Retirement	Resigned	Other reasons	Total	2004 Attrition		
Spec.Dr – ObGyn.					0	0%					0	0%					0	0%	165	0.0%
Spec.Dr – F.Med.	2	1			3	6.1%	1		1	1	3	6.1%					0	0%	49	4.1%
Spec.Dr–Other	22	4	15	21	62	6.4%	32	7	23	37	99	10.2%	17	5	17	49	88	9.0%	975	8.5%
<b>Sub-Total Doctor</b>	<b>24</b>	<b>5</b>	<b>15</b>	<b>21</b>	<b>65</b>	<b>5.5%</b>	<b>33</b>	<b>7</b>	<b>24</b>	<b>38</b>	<b>102</b>	<b>8.6%</b>	<b>17</b>	<b>5</b>	<b>17</b>	<b>49</b>	<b>88</b>	<b>7.4%</b>	<b>1,189</b>	<b>7.1%</b>
Qual.Med.Resident			1	3	4	1.2%	1		2	2	5	1.5%	1		4	6	11	3.3%	330	2.0%
Med.Res–ObGyn					0	0%					0	0%					0	0%	73	0.0%
Med.Res.– Family Med.					0	0%				1	1	4.8%					0	0%	21	1.6%
Med.Res. – Other			4	5	9	1.7%			5	10	15	2.8%			2	13	15	2.8%	533	2.4%
GPs	3		1	14	18	1.7%	23	1	5	18	47	4.4%	5			25	30	2.8%	1,066	3.0%
<b>Sub-Total Med-Res</b>	<b>27</b>	<b>5</b>	<b>21</b>	<b>43</b>	<b>96</b>	<b>3.0%</b>	<b>57</b>	<b>8</b>	<b>36</b>	<b>69</b>	<b>170</b>	<b>5.3%</b>	<b>23</b>	<b>5</b>	<b>23</b>	<b>93</b>	<b>144</b>	<b>4.5%</b>	<b>3,212</b>	<b>4.3%</b>
Dental Surgeon		1	3		4	6.3%			1	1	2	3.2%			2		2	3.2%	63	4.2%
Dentist	1		5	3	9	2.0%	3	1	3	5	12	2.7%			2	5	7	1.6%	440	2.1%
Qual. Dental Res.					0	0%					0	0%					0	0%	1	0.0%
Dental Resident					0	0%					0	0%					0	0%	17	0.0%
<b>Sub-Total Dental</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>13</b>	<b>2.5%</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>14</b>	<b>6.3%</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>1.7%</b>	<b>521</b>	<b>2.3%</b>
Registered Nurse	46	2	58	154	260	11.6%	24		41	187	252	11.3%	11	1	24	136	172	7.7%	2,236	10.2%
Assoc. Nurse			3	11	14	2.5%				18	18	3.2%			3	12	15	2.6%	570	2.7%
Midwife	25		2	16	43	4.5%	12		1	15	28	2.9%	8		1	8	17	1.8%	960	3.1%
Asst. Nurse	52	2	22	43	119	4.2%	25	1	12	82	120	4.2%	21		4	31	56	2.0%	2,841	3.5%
<b>Sub-Total Nurse</b>	<b>123</b>	<b>4</b>	<b>85</b>	<b>224</b>	<b>436</b>	<b>6.6%</b>	<b>61</b>	<b>1</b>	<b>54</b>	<b>302</b>	<b>418</b>	<b>6.3%</b>	<b>40</b>	<b>1</b>	<b>32</b>	<b>187</b>	<b>260</b>	<b>3.9%</b>	<b>6,607</b>	<b>5.6%</b>
Pharmacist	2			1	3	1.4%	4		4	1	9	4.1%	3		3	0	6	2.7%	220	2.7%
Pharmacy Asst.	45	2	5	4	56	5.6%	30	2	2	8	42	4.2%	7		2	0	9	0.9%	1,009	3.5%
Sub-Total Pharmacy	47	2	5	5	59	4.8%	34	2	6	9	51	4.1%	10	0	5	0	15	1.2%	1,229	3.4%
Lab. Technician	37	2	5	7	51	24.5%	10	1	5	3	19	9.2%	14	2	1	9	26	12.6%	206	15.5%
Asst. Lab. Technician					0	0%						0%						0%	726	0%
<b>Sub-Total Lab.</b>	<b>37</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>51</b>	<b>5.5%</b>	<b>10</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>19</b>	<b>2.0%</b>	<b>14</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>26</b>	<b>2.8%</b>	<b>932</b>	<b>3.4%</b>
X-Ray Staff	12	4	4	10	30	7.4%	6		6	12	24	5.9%	5		1	10	16	3.9%	408	5.7%
Other Technicians	36	9	9	15	69	8.4%	40	4	13	27	84	10.2%	42	3	4	14	63	7.6%	826	8.7%
Env'l Health Staff	1		2	2	5	0.7%	5			3	8	1.1%	10		1		11	1.5%	757	1.1%
Engineers	1		2		3	1.4%	1		1	3	5	2.4%			1	2	3	1.4%	212	1.7%
Teachers			1		1	3.2%						0%						0%	31	1.1%
Senior Manager					0	0%						0%						0%	101	0%
Mid-Level Manager					0	0%	1		1	2	4	1.0%			4		4	1.0%	417	0.6%
1 <sup>st</sup> Level Manager					0	0%						0%						0%	71	0%
Technical Admin.	1			1	2	0.2%			1		1	0.1%	2				2	0.2%	956	0.2%
Clerical	115	3	10	16	144	7.3%	86	4	13	18	121	6.1%	25	6	7	15	53	2.7%	1,986	5.3%
Sub-Total Admin	116	3	11	17	147	4.2%	87	4	15	20	126	3.6%	27	6	11	15	59	1.7%	3,531	3.1%
Ancillary Staff	261	1	7	71	340	6.0%	212	1	8	52	273	4.8%	172		6	48	226	4.0%	5,668	4.9%
<b>TOTAL</b>	<b>662</b>	<b>31</b>	<b>159</b>	<b>397</b>	<b>1249</b>	<b>5.2%</b>	<b>516</b>	<b>22</b>	<b>148</b>	<b>506</b>	<b>1192</b>	<b>5.0%</b>	<b>343</b>	<b>17</b>	<b>89</b>	<b>383</b>	<b>832</b>	<b>3.5%</b>	<b>23,394</b>	<b>4.6%</b>

Notes: Pre-Retirement means "S'idah" in Jordan, where a civil servant can take pre-retirement leave on half pay for his/her last 3 years of service without losing their pension benefits. Information provided by the MOH for leavers in 2004 covered only 11 months. An adjustment was therefore made to adjust the number of leavers in 2004 to a 12-month equivalent.

Registered Nurses show the next highest level of attrition, with an average annual loss rate of 10.2%. This equates to 228 registered nurses leaving each year. The loss rates of all nurse categories has been 5.6% a year, or 370 nurses leaving the MOH each year at present levels of employment.

Other technicians show an average annual attrition rate of 8.7% each year, representing an average annual loss of 72 technicians each year.

Specialist doctors have been leaving at an average rate of 7.1% each year, representing a loss of 82 per year. Given the length of time

it takes to produce a specialist doctor, this loss is significant.

For doctors of all types, the annual attrition rate has been 4.3% or 138 a year at present MOH employment levels. An average of 3% of all medical residents have been leaving each year, representing an annual loss of 29 residents not completing their residency programs.

In comparing the data shown in Table 11 with the data on those staff currently on long leaves of absence (Table 10), it appears that health professionals prefer to use the benefit of taking leave and protecting their government

employment, rather than resigning from the MOH.

#### 4.8 WORKLOAD BY STAFF MEMBER AT HEALTH CENTRES

Table 12 presents data on the average number of patient visits (GP visits) per staff member at the different types of health centres in each Directorate.

Table 12 focuses only on the following categories of staff:

*Doctors.* Including GPs and Specialist Doctors posted to the health centres of each type.

**Table 12 Average Workload per Staff Member per Day (GP Visits)**

Region	Directorate	Comp. H/Cs			Primary H/Cs			Village H/Cs		
		Visits/ Doctor	Visits/ Qual. Nurse (1)	Visits/ Nurse (2)	Visits/ Doctor	Visits/ Qual. Nurse (1)	Visits/ Nurse (2)	Visits/ Doctor	Visits/ Qual. Nurse (1)	Visits/ Nurse (2)
Central	Capital	24	202	58	34	932	76	(6)	(5)	45
	East Amman	29	323	129	33	543	136	109	(5)	0
	Madaba	54	(5)	36	29	888	28	29	(5)	22
	Zarqa	37	117	39	40	576	74	(4)	(5)	18
	Balqa	30	193	25	27	176	17	(4)	(5)	55
	Dair Alla	(3)	(3)	(3)	59	472	21	(4)	(5)	44
	South Shuneh	(3)	(3)	(3)	50	353	39	36	(5)	36
North	Irbid	31	309	28	53	235	42	213	(5)	30
	North Agwar	(3)	(3)	(3)	50	(5)	20	(4)	(5)	10
	Ramtha	(3)	(3)	(3)	43	765	51	(3)	(3)	(3)
	Al-Kura	(3)	(3)	(3)	50	(5)	39	(3)	(3)	(3)
	Bani Kenanah	(4)	(4)	(4)	39	(5)	29	(6)	(3)	20
	Ajlun	36	109	21	57	186	13	(4)	(3)	10
	Jarash	(3)	(3)	(3)	41	(3)	19	(4)	(3)	13
	Ma'raq	23	50	15	30	219	25	47	(3)	12
	North Badiah	24	36	13	15	128	9	(4)	(3)	3
South	Karak <sup>(1)</sup>	21	52	6	20	137	5	(4)	(3)	3
	Tafieleh	22	31	6	19	17	5	(4)	17	2
	Ma'an	10	103	15	17	90	19	(4)	(3)	56
	Aqaba	7	30	15	31	66	29	(1)	(3)	(3)

#### Notes

- (1) Qualified Nurse includes Registered & Associate Nurses
- (2) Includes Registered, Associate & Assistant Nurses
- (3) No Health Centre of this type in the Directorate
- (4) No GP visits reported to the MOH information centre
- (5) No qualified nurse posted to these health centres
- (6) No doctor posted to these health centres



*Qualified Nurses.* Including Registered and Associate Nurses posted to the health centres of each type.

*All Nurses.* Including Registered, Associate and Assistant (Unqualified) nurses posted to the health centres of each type.

The number of days that each staff member is assumed to work in one year was calculated as follows:

- Total days in a year: 365
- Fridays in a year: 52
- Public Holidays in a year: 18
- Vacation days in a year: 30
- Total working days in a year: 265

Table 12 shows that the average number of patient visits per doctor per working day at comprehensive health centres varies from a low of 7 in Aqaba to a high of 54 in Madaba.

At primary health centres, the range of patient visits per doctor is from 15 in North Badiyah to 57 in Ajlun.

In relation to the number of patient visits per qualified nurse, the range at comprehensive health centres is from a minimum of 30 in Aqaba to a maximum of 323 in East Amman. Clearly, the number

of patient visits in East Amman could not be handled by qualified nurses alone and therefore the workload must be shared with the assistant (unqualified) nurses.

Turning to the number of patient visits per nurse of all kinds (excluding midwives) at each type of health centre, the range is from 6 in Karak and Tafieleh to a high of 129 in East Amman at comprehensive health centres. A similar pattern is found at the primary health centres, where the patient visits per nurse range from a low of 5 in Karak and Tafieleh to a high of 136 in East Amman.

The situation at village health centres is difficult to interpret and there are concerns that the personnel database has not correctly allocated staff to these centres. For example, it is reported that there are 25 village health centres in East Amman. However, the total staff which the personnel database has coded to village health centres in East Amman equates to only three: one GP and two administrative staff.

Table 13 presents data on the average number of patient visits (MCH visits) per staff member at the different types of health centres in each Directorate.

Table 13 assumes that all MCH patients are served by midwives only. Although this is clearly not always the case, since there are some village health centres who are reporting MCH visits to the

MOH Information Unit but who have no midwife posted there.

Again, the number of days that each midwife is intended to work each year is 265.

As shown in Table 12, at comprehensive health centres the number of patients per midwife varies from a low of two per day in Aqaba to a high of 36 per midwife per day in East Amman. This would mean that in East Amman, each midwife could spend an average of 13 minutes with each patient, if they were working constantly for an 8-hour day.

At primary health centres, the workload range per midwife is two in Mafraq to a high of 37 in East Amman.

The data for village health centres and MCH units is too meagre to be of much meaning. Many of these units did not report to the MOH Information Centre on their MCH visits during 2004. Others may have reported some MCH visits, but have no midwife, so the work is presumably being carried out by assistant nurses.

In general, the extreme variations in workload per staff member indicate that the number of MCH patients visiting a health unit is not being taken into account in decisions about the deployment of available staff.

Table 13: Average Workload per Staff Member per Day (MCH Visits)					
Region	Directorate	MCH Visits per Midwife			
		Comp. H/C	Primary H/C	Village H/C	MCH Unit
Central	1. Capital	30	37	(2)	83
	2. East Amman	36	32	(5)	(1)
	3. Madaba	8	16	(2)	(3)
	4. Zarqa	29	15	(3)	49
	5. Balqa	22	16	(2)	113
	6. Dair Alla	(1)	24	(2)	(3)
	7. South Shuneh	(1)	49	(3)	(1)
North	8. Irbid	16	16	(2)	9
	9. North Agwar	(1)	29	(2)	11
	10. Ramtha	(1)	8	(1)	(1)
	11. Al-Kura	(1)	20	(2)	(2)
	12. Bani Kenanah	(2)	8	10	(1)
	13. Ajlun	17	28	30	(1)
	14. Jarash	(1)	20	(2)	(2)
	15. Mafraq	9	2	0.5	(2)
	16. North Badiah	13	5	(2)	(2)
South	17. Karak <sup>(1)</sup>	9	9	(2)	6
	18. Tafieleh	11	7	2	(1)
	19. Ma'an	7	6	(2)	(1)
	20. Aqaba	2	11	(2)	(2)

Notes:

(1) No H/C of this type in the Directorate

(2) No MCH visits reported

(3) No midwife posted to these health centres

#### 4.9 WORKLOAD BY STAFF MEMBER AT HOSPITALS

Table 14 provides an analysis of staff in each hospital according to the number of in-patients each staff member has to provide services for each day.

The number of working days per year for staff member is estimated in the same way as for health centres (i.e. that each staff member works an average of 265 days each year). The only exception to this was for the staff of Al Basheer hospital, where they do not work either on Fridays or Saturdays, so

that their total working days per year is 213.

The analysis of workload per staff member is not intended to dictate what an individual's daily workload should be. The data is intended to raise questions about whether the deployment of available staff in the MOH bears any relationship to the workload of different hospitals. Nevertheless, in cases where each staff member is having to provide services to only one to three patients per day does raise questions about how these staff spend their time.

For doctors, the average number of in-patients per day per doctor varies from 0.2 and 0.3 at Al-Rueshid and Princess Salma hospitals respectively, to a high of 7.3 at the National Psychiatric Centre. The other hospital that shows a high workload per doctor is the Al-Mafraq Gynaecological Hospital.

For qualified nurses, Al Rueshid hospital shows that each nurse is providing service to less than one patient per day, while at the National Psychiatric Centre, each nurse is providing service to more than 9 patients per day.

For pharmacists, the situation ranges from less than one patient per day at Al-Rueshid hospital to 27 at the National Psychiatric Centre, with many hospitals averaging one pharmacist for every 11 in-patient days. Of course, the data does not include out-patients, which will constitute a large

proportion of the daily work of pharmacy staff.

For laboratory staff, the situation at the National Psychiatric Centre, Al-Basheer and Al-Zarqa hospitals seems out of line with other hospitals, where the average is around 5 patients per laboratory staff member each day. Princess

Salma is also out of line, with each staff member providing service to less than one patient each day.

Again, as for the health centres, the general impression is that hospital workload is not always being taken into account in the deployment of available staff.

**Table 14: Workload per Staff Member per Day at MOH Hospitals**

Hospital	In-Patient Days	In-Patient Days Per Staff Member										
		Dr <sup>1</sup>	Qual Nurse <sup>2</sup>	All Nurse <sup>3</sup>	Pharmacy	Lab. Staff	X-Ray Staff	Other Techs	Tech. Admin	Clerks	Anc.	All Staff
Al-Basheer	219,633	1.8	5.2	3.7	12.3	15.2	13.7	7.3	19.1	14.3	6.4 <sup>3</sup>	0.5
National Centre for Addiction	4,677	0.6	0.7	0.4	2.0	9.0	9.0	2.0	4.0	1.0	0.5	0.1
Dr Jameel Al-Totani	30,734	2.1	2.6	2.5	6.4	7.7	9.7	4.5	7.2	9.7	4.5	0.3
Al-Nadeem	24,653	1.6	4.5	2.2	7.2	6.2	10.3	6.6	9.3	3.2	1.7	0.3
Princess Salma	1,610	0.3	0.7	0.5	0.8	0.8	2	2	1	0.4	0.4	0.04
Al-Zarqa	84,173	1.6	5.0	3.3	13.2	10.6	18.7	11.0	26.5	13.2	4.4	0.4
Prince Faisal Bin Al-Hussein	39,796	2.1	3.9	3.0	10.0	6.3	21.5	4.3	13.7	9.4	3.4	0.4
National Centre of Psychiatry	57,729	7.3	9.1	5.1	27.2	108.9	108.9	24.2	54.5	15.6	3.5	0.7
Al-Hussein, Salt	41,584	1.1	3.2	1.9	5.1	7.5	9.8	5.1	10.5	6.0	2.1	0.2
Princess Eiman Ma'di	7,643	1.1	3.0	1.3	4.1	4.8	5.8	5.8	7.2	5.8	1.1	0.2
Al-Shouneh Al-Janoubia	8,119	1.1	3.2	1.6	3.8	3.8	5.1	3.4	30.6	3.4	0.8	0.2
Princess Basma	56,669	1.1	3.6	2.3	10.2	5.3	6.7	5.9	12.6	4.9	2.9	0.3
Princess Rahma	34,181	3.1	3.9	2.9	11.7	5.0	32.2	12.9	9.9	7.6	4.0	0.4
Princess Badea	27,426	2.4	8.9	4.4	14.8	no staff	12.9	8.6	7.4	4.9	2.8	0.4
Abu Obaidah	12,495	1.8	4.3	1.5	5.2	4.7	6.7	4.3	5.9	9.4	1.4	0.2
Mua'th Bin Jabal	7,381	1.0	3.6	1.2	4.6	3.1	4.6	2.5	5.6	2.8	0.8	0.1
Al-Ramtha	14,294	1.5	3.2	1.8	4.5	6.7	6.0	4.5	13.5	4.9	1.1	0.2
Princess Raya	18,205	2.0	3.0	1.8	7.6	7.6	8.6	4.0	8.6	3.6	1.9	0.2
Al-Yarmouk	6,023	0.6	1.7	1.1	1.9	1.9	1.6	2.1	2.3	1.0	0.9	0.09
Al-Iman	22,879	1.9	3.0	1.6	10.8	6.6	7.8	5.1	6.2	3.6	1.8	0.2
Jarash	31,319	2.4	4.9	2.2	11.8	7.4	13.1	5.9	14.8	3.9	2.3	0.3
Al-Mafraq (Gynae/Paediat)	20,549	4.3	4.2	3.0	15.5	7.0	8.6	8.6	25.8	12.9	9.1	0.7
Al-Mafraq	20,549	3.0	3.3	2.7	15.5	7.0	15.5	8.6	12.9	6.5	4.6	0.4
Al-Rueshid	948	0.2	0.2	0.1	0.7	0.7	0.7	0.4	0.6	0.3	0.2	0.01
Al-Karak	34,186	1.5	5.1	2.1	9.2	7.2	9.9	5.9	12.9	4.0	2.2	0.3
Ghor Al-Safi	15,569	1.5	6.3	2.8	7.3	7.3	14.7	11.8	11.8	3.9	2.1	0.3
Ma'an	27,612	2.2	3.3	2.6	10.4	7.4	8.7	8.7	20.8	14.9	2.4	0.3
Queen Rania Al-Abdullah	7,699	0.7	1.3	1.1	9.7	4.2	7.3	9.7	9.7	5.8	3.2	0.2

<sup>1</sup>Doctors include Medical Specialists (but not dental specialists), Qualified Medical Residents, Medical Residents & GPs. Qualified Nurses include Registered Nurses & GPs

<sup>2</sup>Qualified Nurses include Registered and Associate Nurses.

<sup>3</sup>All nurses include Registered Nurses, Associate Nurses and Assistant Nurses. For nurses, the total number employed at each hospital has been divided by 3 to obtain the number of nurses that could be expected to be working at any one time, taking account of the nursing shifts.

<sup>4</sup>Al-Basheer hospital contracts out many of its hotel service, therefore it is to be expected that the workload per ancillary staff member would appear to be relatively high.

## V. EDUCATION PROGRAMS FOR HEALTH PROFESSIONS

### 5.1 BASIC AND POST BASIC EDUCATION

The Ministry of Higher Education (MOHE) establishes educational standards for all health professional studies at public and private universities and colleges throughout Jordan. Under the auspices of the MOHE, Balqa University has specific responsibility for establishing educational standards at the college level. Universities conduct programs of 4-6 academic years (126 to 257 credit hours) leading to a Bachelor's Degrees for physicians, dentists, pharmacists, nurses and others. Universities conduct post basic programs leading to diplomas, and higher degrees such as Masters and PhD degrees. Public and private colleges offer Associate's Degree programs of 2 years duration for nursing, midwifery and the allied health professions including laboratory, pharmacy, and physiotherapy.

While two public universities are preparing the majority of physicians, pharmacists and dentists educated in Jordan, private Universities such as Philadelphia and Applied Sciences have plans to introduce medical studies. Until recently, degree programs for nurses and other health professionals, such as pharmacists and laboratory technologists, have been conducted mainly in public universities. Now, the six public Universities offering BSc in Nursing have been joined by three private universities, Zetuna, Philadelphia and Applied Science. While the education of diploma certified allied health professionals, including nurses and technicians, has traditionally been the responsibility of the MOH the recent decision to professionalize nursing has lead to greater participation of private colleges offering nursing programs. There are now 15 private colleges licensed by MOHE to conduct associate nursing programs. However, attempts to introduce associate degree programs for other allied health professionals have been largely unsuccessful due

to lack of interest among prospective students.

Bridging programs are offered at Public and Private Universities to enable nurses from non baccalaureate programs who have the required Tawjihi scores to complete the requirements for a Bachelors Degree. The scholastic record of nurses entering the bridging program is evaluated to determine the credit hour requirements for the Bachelors Degree in Nursing. Registered nurses typically take 2-3 academic years to complete the course work. Nurses entering these programs are mainstreamed with those who have entered directly.

JUST and Jordan Universities offer a range of Masters and PhD. programs in the areas of medicine, dentistry, management, nursing, pharmacy.

Table 15 provides details of existing education programs in Jordan for the health professions.

**Table 15: Education Programs for Health Professions**

Profession	Programme of Study	Institution/Facility	Duration
Medicine	Medical Residency Program	MOH, JU and RMS Hospitals	4-5 years
	MSc Community Medicine	Public: JUST	2 years
	Diploma Community Med	MOH HR Directorate	1 year
	MD	Public: • JUST • Jordan University • Mo'ata Private: Philadelphia University (planned)	6 years + 1 year Intern
Dentistry	Residency Program	MOH/RMS Hospitals	4 years
	MSc Dentistr	JUST	2 years
		Jordan University	
	Dentist	JUST	5 years+ 6 mth. internship
		Jordan University	
Management	MSc. Health Services Management	Public: JUST	2 years
	Masters in Public Health	Public: Jordan University	2 years

**Table 15: Education Programs for Health Professions (continued)**

Profession	Programme of Study	Institution/Facility	Duration
Nursing	MS Nursing	Public: <ul style="list-style-type: none"> <li>• JUST</li> <li>• Jordan University</li> </ul>	2 years
	Diploma: PHC, Clinical Teaching, Critical Care	MOH: Nursing Institutes	9 month
	BSN/ Registered Nurse	Public: <ul style="list-style-type: none"> <li>• JUST</li> <li>• Jordan University</li> <li>• Mo'ata University, Civil (Kerak)</li> <li>• Mo'ata Univ. RMS-Princess Muna</li> <li>• Hashimeih,</li> <li>• Al-Al Bayt</li> </ul>	4 years
	BSN Registered Nurse	Private: <ul style="list-style-type: none"> <li>• Univ of Applied Science</li> <li>• Philadelphia (2004-5)</li> <li>• Zetuna</li> </ul>	4 years
	Registered Nurse Bridging to BSN	Public: <ul style="list-style-type: none"> <li>• JUST</li> <li>• Jordan University</li> <li>• Al-Bayt</li> </ul> Private: Zetuna	2-3 years
	Assoc. Degree Nurse	Public MOH: <ul style="list-style-type: none"> <li>• Rufaida</li> <li>• Nusaibeh</li> </ul> Public: MOHE: <ul style="list-style-type: none"> <li>• Salt,</li> <li>• Ajloun,</li> <li>• Kerak,</li> <li>• Ma'an</li> </ul> Public: RMS <ul style="list-style-type: none"> <li>• RMS Allied Health</li> </ul> Private Colleges <ul style="list-style-type: none"> <li>• Ibn Khaldoun</li> <li>• Zarqa Ahlieh</li> <li>• Gharnata</li> <li>• Al-Razi</li> <li>• Mujtama Islamia</li> <li>• Qurdova</li> <li>• Alrabieh</li> <li>• Qudus</li> <li>• Jame'aieh Mutuwashteh</li> <li>• Khawarzni</li> <li>• Mujtama Arabia</li> <li>• Andalus</li> <li>• Queen Alia</li> <li>• Hetein</li> <li>• Qadesia</li> </ul>	2 years
Midwifery	BS Midwifery	Public: JUST	4 years
	Associate Degree Midwife	MOH Colleges: <ul style="list-style-type: none"> <li>• Rufaida,</li> <li>• Nusaibeh</li> </ul>	3 years

**Table 15: Education Programs for Health Professions (continued)**

Profession	Programme of Study	Institution/Facility	Duration
Pharmacy	MSc. Pharmacy	Public: • JUST • Jordan Univ.	2 years
	BSc Pharmacist	Public : • JUST • Jordan University Private: • Al-Zetuna Applied Science	5 years
	Assoc. Degree Assistant Pharmacist	MOH: • Yajouz Institute • Irbid Institute	2 years
Laboratory	BSc. Laboratory Technician	Public: • JUST • Hashemieh	4 years
	Associate Degree Assistant Laboratory Technician	MOH: • Yajouz Institute • Irbid Institute	2 years
Radiography	Assoc. Degree X Ray Tech.	MOH: • Yajouz Institute • Irbid Institute • RMS	2 years
Environmental Health	Assoc. Degree Health Inspector	MOH: • Yajouz Institute • Irbid Institute	2 years
Rehabilitation	BSc. Physiotherapy	Public: • Hashimieh University • Jordan University • JUST	4 years
	Assoc. Degree Physiotherapist	MOH: • Yajouz Institute • Irbid Institutes	3 years
Anaesthesia	Assoc. Degree Anaesthesia Technician	MOH: • Yajouz Institute • Irbid Institute	2 years
Nutrition	BSc. Dietician	Public: • JUST • Jordan University	4 years

## 5.2. STUDENT ENTRY REQUIREMENTS

Students can enter public universities in either competitive or non-competitive tracks. Acceptance into either track is based upon Tawjihi scores, but no student is accepted if their Tawjihi score is lower than the established norms, (65% in the humanities and sciences, and 85% in the medical, pharmacy and dental faculties). Since the competitive track is extremely competitive, the scores of students accepted into this track

greatly exceed the minimum standard. While Universities have designed the non-competitive track for a variety of audiences, in general, students in non-competitive programs students have lower Tawjihi scores and pay higher fees. Universities call the non-competitive track a variety of names including; parallel, international, evening and complementary.

Associate Degree programs are offered in colleges operated by MOH, RMS, MOHE and private

organizations. MOHE established 50% as the minimum Tawjihi score required for entry into Associate Degree programs. Fifteen private colleges were licensed in 2000 and granted permission to accept a maximum of 60 students per year in the nursing program. The entry standards for students applying to private colleges vary among schools, some take all applicants who have the minimum entry score of 50% and other schools are more selective.

### 5.3 COST OF EDUCATION

The cost of education in Public Universities is subsidized by the Government of Jordan and students accepted into the government supported competitive track pay significantly lower fees than those in the non competitive track. When University managers plan for the academic year they decided how to apportion seats among competitive (low fee students) and non-competitive, high fee students. The recent reduction in Government subsidies

to Universities is likely to result in increased fees for students in both tracks, with the possible consequence that fewer students will be able to afford studies in the health professions. At the Jordan University Medical School, recent fee increases for competitive track students have brought the two fees schedules closer together setting the stage for a one fee structure. Fees charged by private universities for studies in the health professions are comparable to the fees at public universities for non competitive track programs.

While a limited number of scholarships are available from a variety of sources, there is no plan to increase the number of scholarships in the health professions programs to offset the higher fees.

The cost of education in associate degree programs ranges from scholarship programs offered by the MOH to private colleges where cost per credit hour is approximately 20 JD or 1200 JD for a 60 credit course of studies.

<b>Table 16: Average Cost of Education for Health Professions</b>				
<b>Profession</b>	<b>Competitive Cost/Credit Hour</b>	<b>Total JD</b>	<b>Non-Competitive Cost/Credit Hour</b>	<b>Total JD</b>
<b>Bachelor's Degree</b>				
Medicine	40.5	10,363	163	41,746
Nursing	12.5	1,600	53.30	6,845
Pharmacy	25	3,876	83	12,950
Dentistry	35.5	7,221	163	33,247
Laboratory	32	4,416	50	6,900
Physiotherapy	33	4,270	66.5	8,572
Nutrition	21	2,850	63	8,592

Cost details for health professions' education at each institution are given in Annex 4.

Scholarship students attending MOH nursing colleges, allied health training institutes, and specialized nursing institutes pay a penalty of 150 JD per month for discontinuing or failing. Graduates sign a contract committing to two years of service for each year of scholarship education.

### 5.4 STUDENT INTAKE AND GRADUATION RATES

Table 17 provides details of student intakes and outputs from health professions training programs in Jordan averaged for

three years. The table also provides the graduation rate for each program. Details of intakes and outputs from individual training institutions are given in Annex 5.

Universities take into consideration the availability of tutors, physical infrastructure (classroom, laboratory, availability of clinical practice sites) and public interest in the program when establishing student intake quotas. Annually all universities in Jordan submit estimates for student intake for each program of study to the Higher Education Council for approval. The Council accepts or amends university requests and makes an allocation of students to

each university from lists of special candidates that include children of the military, MOH, MOHE, and others. Jordan University estimates that 40% of competitive track students are drawn from these lists. The data on student intakes also show changes in student admissions from year to year resulting from administrative, philosophical and financial decisions by University leaders such as a decision to increase parallel track students to increase program income.

The Ministry of Health does not participate in formal discussions or decisions related to plans for student intakes at public or private universities and colleges.

<b>Table 17: National Totals of Intakes/Outputs for Health Professions Education</b>				
<b>Program of Study</b>	<b>Length of Training</b>	<b>Average Intake</b>	<b>Average Output</b>	<b>Average Graduation Rate</b>
<b>Physicians</b>				
Medical Resident	5 years	9	7	77%
Medical Resident	4 years	129	114	88%
Diploma in Community Med	1 year	13	13	100%
Medical Internship	1 year	285	237	83%
Medical Doctor	6 years	216	162	75%
<b>Dentists</b>				
Residency Program	4 years	(1)	(1)	(1)
Dental Intern	1 year	107	107	100%
Dentist (1)	5 years	170	131	77%
<b>Management</b>				
MSc. Health Services Mgt.	2 years	(1)	(1)	(1)
Masters Public Health	2 years	(1)	(1)	(1)
<b>Nursing</b>				
MSc. Nurse	2 years	23	33	131%
Post Basic Diploma	9 months	26	24	92%
BS Nurse	4 years	846	646	76%
Registered Nurse Bridging	2 years	(2)	(2)	(2)
Associate Degree Nurse	2 years	(1)	815 (4)	90%(3)
<b>Midwifery</b>				
BS Midwifery	4 years	(1)	(1)	(1)
Associate Degree Midwife	3 years	87	81	93%
<b>Pharmacy</b>				
MSc. Pharmacy	2 years	37	19	51%
BSc. Pharmacy	5 years	788	576	73%
Associate Degree Pharmacy	2 years	25	24	98%
<b>Laboratory</b>				
BSc. Laboratory Technician	4 years	143	67	47%
Assoc. Degree Lab Tech	2 years	45	45	100%
<b>Radiography</b>				
Assoc. Degree X Ray Tech	2 years	42	36	85%
<b>Environment Health</b>				
Assoc. Degree Health Inspect.	2 years	24	22	92%
Rehabilitation				
BSc. Physiotherapy	4 years	152	139	91%
Assoc. Degree Physiotherapist	3 years	23	23	100%
Anesthesia				
Assoc. Degree Technician	2 years	43	43	98%
Nutrition				
BSc. Dietician/Nutritionist	4 years	96	57	60%

(1) Pending additional data

(2) Insufficient data for analysis

(3) Data from MOH program only

(4) Based on graduation data for 2002-03

The MOH Department of Human Resource Development decides on the type of associate and diploma courses to offer at their Institutes and on the maximum number of students to be admitted. These decisions are based upon discussions with the MOH Department of Personnel and

analysis of the civil service lists containing qualified candidates awaiting placement.

In 2000, Balqa University issued licenses to private colleges to confer the associate's degree and established 60 students as the maximum intake per year for

nursing students. Since the first graduation in 2002, private colleges have graduated 58% or 934 of the 1630 Associate Degree nurses completing studies in all programs (MOH, MOHE, RMS and Private). There is however, growing concern about the quality of nursing education at private



colleges. The Jordanian Nursing Council and the Jordan Nurses and Midwives Council (the nursing syndicate) are advocating for acceptance of the Baccalaureate Degree as the only nursing credential. If the campaign is successful, the number of qualified nurse graduates would be dramatically reduced.

Graduation rates for basic professional degrees in medicine, dentistry, pharmacy and nursing are between 73% and 77%. The rate of graduation among medical interns is 83%; negatively affected

by the 67% completion rate for women. Graduation rate for nurses in the Baccalaureate Degree program is 76%, characterized by low graduation rates in newly established programs and among male students. Interestingly while male nursing students comprise 64% of intake they are only 46% of graduates suggesting high dropout or failure rates among men.

## 5.5 STUDENT TEACHER RATIOS

Table 18 provides details of present student to teacher ratios

for each of the various health professions education programmes offered in Jordan. Student teacher ratios are lowest in medical school and highest at the schools of nursing and pharmacy. At the associate's degree level MOH programs also have low student teacher ratios. Since faculty for many science curricula serve a range of programs and teach both undergraduate and graduate courses it is difficult to determine the student teacher ratios for many programs.

Table 18: Student Teacher Ratios		
Education Program	Students per Teacher	
	Public	Private
<b>MOHE/Universities: Basic</b>		
Medical Doctor (6 years)	12	
Dentistry (5 years)	18	
Pharmacy (5 years)	40	23
Nursing (4 years)	36	31
Laboratory Technology (4 years)	11	
<b>MOHE/Colleges (Associate Degree)</b>		
Pharmacy Assistant	(1)	(1)
Associate Nurse	(1)	(1)
<b>MOH Institutes (Assoc. Degree/ Diploma)</b>		
Community Medicine (Diploma)	(1)	(1)
Associate Nurse	17	
Associate Midwife	16	
Pharmacy Assistant	(1)	(1)
Laboratory Assistant	(1)	(1)
Physiotherapy Assistant	28	
X Ray Technicians	(1)	(1)
Anaesthesia Assistant	(1)	(1)
Critical Care/PHC/Clinical Inst.	1.5	

1) Pending additional data

## 5.6 GENDER OF STUDENTS STUDYING THE HEALTH PROFESSIONS

Table 19 shows the gender of students studying in the health professions training programmes. Medical school data for three years show females comprising 36% of students entering medical school and 34% of graduates while 12% of medical interns are female. The drop in female representation between basic training and post-basic training is repeated for dental interns where 52% of dental students and 33% of dental interns are women.

While female medical residents account for only 17% of the total, they represent 46% of obstetric/gynaecology residents. A significant percent of students studying pharmacy, dentistry and physiotherapy are female.

Gender distribution in Bachelor's Degree nursing programs has shifted toward higher representation by male students. Females accounted for 21% of graduates from Al Zetuna, and Applied Science in the years 2001-03. At five public universities with graduating classes in the same period, females comprised 46% of graduates. Recently, there has been a significant increase in the proportion of men seeking nursing

careers. In one year (2002-2003) male representation in Associate Degree programs increased 44%. Between 1998-99 the number of men entering Baccalaureate Nursing programs increased 47%. Reports from the Ministry of Health Department of Nursing describe significant shortages of female nurses at hospitals making it difficult to provide adequate nursing care for patients, particularly on female wards. Data on gender distribution among graduates of university nursing programs 2000-2003 help to explain the current nursing shortage at hospitals. According to University administrators, this trend is likely to continue.

Table 19: Gender of Students Studying the Health Professions		
Program of Study *	% Male	% Female
<b>Post Graduate Degree</b>		
Medical Residents (all) (2001-03)	83%	17%
Medical Residents (ob/gyn) (2001-03)	54%	46%
Med. Residents (fam med) (2001-03)	33%	66%
Community Med. Diploma (2001-03)	75%	25%
<b>Bachelor's Degree</b>		
Medicine (2001-03)	66%	34%
Medical Internship (2001-3)	88%	12%
Dentistry (2001-03)	44%	55%
Dental Internship (2003-05)	67%	33%
Pharmacy (2001-03)	44%	56%
Nursing (2001-04)	60%	40%
Laboratory (2001-03)	33%	67%
Physiotherapy (2003)	39%	61%
Nutrition (2001-03)	32%	68%
<b>Associate's Degree</b>		
Pharmacy (3) (4) (2002-03)	10%	90%
Laboratory (3) (2003)	20%	80%
Physiotherapy (3) (2001-03)	33%	67%
Nursing (2002-03)	41%	59%
Midwifery (3) (2001-03)		100%
Radiography (3) (2002-03)	60%	40%
Anesthesia (3) (2001-03)	58%	42%
Health Inspector (3)(4)	27%	73%

\*Dates following program descriptions show the graduation years presented in the analysis

(1) Preliminary figure based on data from JU

(2) No data

(3) Based on data from MOH

(4) Program discontinued

## **ANNEXES**

- ANNEX 1     DETAILS OF INDIVIDUAL HOSPITALS BY DIRECTORATE**
- ANNEX 2     STAFF CATEGORIES USED FOR THE HUMAN RESOURCES PROJECT**
- ANNEX 3     SUMMARY OF STAFF-IN-POST IN NOVEMBER 2004 BY HEALTH  
DIRECTORATE**
- ANNEX 4     COST OF HEALTH PROFESSIONS EDUCATION BY INSTITUTION**
- ANNEX 5     EDUCATION PROGRAM INTAKES AND OUTPUTS BY COURSE AND SCHOOL**
- ANNEX 6     STUDENT/TEACHER RATIOS BY PROGRAM AND INSTITUTION**

# ANNEX I: DETAILS OF INDIVIDUAL HOSPITALS BY DIRECTORATE

## Hospitals in Jordan 2003

Directorate	Sector (I)	Hospital Name	Total Beds 2003	Occupancy Rate %	In-Patient days
Amman Capital	MOH	1. Al-Basheer	811	74.6%	219,633
		2. National Centre for Addiction	20	64.1%	4,677
		3. Prince Hamza in Al-Hussein	Not yet open		
	RMS	1. Hussein Medical City	817	no data	no data
		2. Queen Alia	230	no data	no data
		3. Psychiatric Centre	30	no data	no data
	Univ	1. Jordan University Hospital	540	no data	no data
	Private	1. Al Islami	248	no data	no data
		2. Jordan	169	no data	no data
		3. Al-Khalidi	160	no data	no data
		4. Specialist	150	no data	no data
		5. Arab Medical Centre	141	no data	no data
		6. Al-Hussein Cancer Centre	130	no data	no data
		7. Al-Isteqlal	100	no data	no data
		8. Ibn-Al-Hitham	97	no data	no data
		9. Al-Mas'sar	94	no data	no data
		10. Al-Haya	90	no data	no data
		11. Al-Mouasa	83	no data	no data
		12. Al-Israa	80	no data	no data
		13. Al Qds	70	no data	no data
		14. Malhas	69	no data	no data
		15. Amman Al-Jirahi	69	no data	no data
		16. Al-Shahed Abu Dia	68	no data	no data
		17. Al Duale	67	no data	no data
		18. Al-Hilal Al-Ahmer	64	no data	no data
		19. Farah-Womans	63	no data	no data
		20. Al-Shmesani	60	no data	no data
		21. Lozamaila	58	no data	no data
		22. Tla'a Alali	52	no data	no data
		23. Al-Ahli	50	no data	no data
		24. Flasteen	49	no data	no data
		25. Al-Italy/Amman	47	no data	no data
		26. Marka Al-Taqasosi Al-Islami	42	no data	no data
		27. Faledelfia	31	no data	no data
		28. Aqla	30	no data	no data
		29. Hepa/Womans	30	no data	no data
		30. Al-Hmayda	30	no data	no data
		31. Al-Hnan	30	no data	no data
		32. Al-Amal/ Womans	29	no data	no data
		33. Al-Oyoon Al-Taqasosi	18	no data	no data

### Hospitals in Jordan 2003, continued

Directorate	Sector (I)	Hospital Name	Total Beds 2003	Occupancy Rate %	In-Patient days
Amman Capital	Private Cont.	34. Jabal Amman	15	<i>no data</i>	<i>no data</i>
		35. Al-Bayader	15	<i>no data</i>	<i>no data</i>
		36. Milad	15	<i>no data</i>	<i>no data</i>
		37. Abd Al-Hadi for eyes	15	<i>no data</i>	<i>no data</i>
East Amman	MOH	3. Dr Jameel Al-Totani	129	65.3%	30,734
Madaba	MOH	4. Al-Nadeem	91	74.2%	24,653
		5. Princess Salma	32	18.8%	1,610
	Private	39. Al-Mahaba	30	<i>no data</i>	<i>no data</i>
Zarqa	MOH	6. Al-Zarqa	298	77.9%	84,173
		7. Prince Faisal Bin Al-Hussein	130	83.9%	39,796
	Private	40. Qaser Shabeb	70	<i>no data</i>	<i>no data</i>
		41. Jabal Al-Zaytoon	68	<i>no data</i>	<i>no data</i>
		42. Al-Hekma Al-Hadith	60	<i>no data</i>	<i>no data</i>
		43. Al-Zarqa Al-Watani	30	<i>no data</i>	<i>no data</i>
		44. Al-Razi Al-Jaded	30	<i>no data</i>	<i>no data</i>
	RMS	4. Al-Amir Hashim	210	<i>no data</i>	<i>no data</i>
Balqa	MOH	8. National Centre of Psychiatry	245	64.6%	57,729
		9. Al-Hussein, Salt	152	75.0%	41,584
	Private	45. Al-Rasheed Psychiatry	66	<i>no data</i>	<i>no data</i>
Dair Alla	MOH	10. Princess Eiman Ma'di	30	69.8%	7,643
South Shuneh	MOH	11. Al-Shouneh Al-Janoubia	39	57.0%	8,119
Irbid	MOH	12. Princess Basma	204	76.1%	56,669
		13. Princess Rahma	109	85.9%	34,181
		14. Princess Badea	95	79.1%	27,426
	Univ	2. Al-Malak Al-Muasas Abdulla	283	<i>no data</i>	<i>no data</i>
	RMS	5. Prince Rashed	259	<i>no data</i>	<i>no data</i>
	Private	46. Ibn Al-Nafees	103	<i>no data</i>	<i>no data</i>
		47. Rahbat Al-Wardia	87	<i>no data</i>	<i>no data</i>
		48. Irbid Al-Taqsosi	82	<i>no data</i>	<i>no data</i>
		49. Al-Qawasmi / Womans	28	<i>no data</i>	<i>no data</i>
		50. Al-Room Al-Katholeik	18	<i>no data</i>	<i>no data</i>
		51. Al-Najah Ltawleed	15	<i>no data</i>	<i>no data</i>
North. Agwar	MOH	15. Abu Obaidah	46	74.4%	12,495
		16. Mua'th Bin Jabal	32	66.5%	7,381
Ramtha	MOH	17. Al-Ramtha	56	69.9%	14,294
Al Kura	MOH	18. Princess Raya	60	83.1%	18,205
B.Kenanah	MOH	19. Al-Yarmouk	50	50.9%	6,023
Ajlun	MOH	20. Al-Iman	105	60.3%	22,879
Jarash	MOH	21. Jarash	135	63.6%	31,319

### Hospitals in Jordan 2003, continued

Directorate	Sector (I)	Hospital Name	Total Beds 2003	Occupancy Rate %	In-Patient days
Mafrq	MOH	22. Al-Mafrq (Gynae/Paediat)	102	55.2%	20,549
		23. Al-Mafrq	70	58.2%	20,549
	Private	52. Masah Al-Noour/Chest	40	<i>no data</i>	<i>no data</i>
North Badiyah	MOH	24. Al-Rueshid	17	15.3%	948
Karak	MOH	25. Al-Karak	126	76.1%	34,186
		26. Ghor Al-Safi	62	74.8%	15,569
	RMS	6. Prince Ali	79	n/a	n/a
	Private	53. Al-Italy / Al-Karak	38	<i>no data</i>	<i>no data</i>
		54. Al-Boutas	30	<i>no data</i>	<i>no data</i>
		55. Al-Salam / Womans	30	<i>no data</i>	<i>no data</i>
Tafeileh	RMS	7.. Prince Zaid	86	<i>no data</i>	<i>no data</i>
Ma'an	MOH	27. Ma'an	122	62.0%	27,612
		28. Queen Rania Al-Abdullah	69	30.6%	7,699
Aqaba	RMS	8. Prince Haya	120	n/a	n/a
	Private	56. Al-Aqaba Al-Hadeth	40	<i>no data</i>	<i>no data</i>
		57. Al-Islami	39	<i>no data</i>	<i>no data</i>

## ANNEX 2: STAFF CATEGORIES USED FOR THE HUMAN RESOURCES PROJECT

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
DOCTORS	Specialist – Obstetrics & Gynaecology		Specialist – Obs.& Gynaecology Head of Gynaecology Dept
	Specialist - Family Medicine		Specialist - Family Medicine
	Other Specialist Doctors	Specialist – other (exc.Obs.& Gynae. Specialist in Community Medicine Assistant Specialist	Psychiatrist Head of General Surgery Dept Head of Neurosurgery Dept Head of Plastic Surgery Dept Head of Orthopaedic Surgery Dept Head of Urology Dept Head of ENT Dept Head of Eye Dept Head of Internal Medicine Dept Head of Paediatric Dept Head of Medical Dept Head of Skin Diseases Dept Head of X-Ray Dept Head of X-Ray Specialists Head of Anaesthetics Dept Head of Pathology Dept Head of Emergency and First Aid Head of Hospital Laboratory Dept Head of ICU Dept Head of Athletic Medicine Section Nuclear Physician Head of Nuclear Medicine Dept Radiotherapy Physician
	Qualified Medical Resident	Qualified Resident Doctor Family Medicine Resident – Qualified	
	Medical Resident in Obstetrics. & Gynaecology		1 <sup>st</sup> Year Resident in Obs. & Gynaecology 2 <sup>nd</sup> Year Resident in Obs. & Gynaecology 3 <sup>rd</sup> Year Resident in Obs. & Gynaecology 4 <sup>th</sup> Year Resident in Obs. & Gynaecology 5 <sup>th</sup> Year Resident in Obs. & Gynaecology

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
DOCTORS Continued	Medical Resident – Family Medicine	1 <sup>st</sup> Year Resident in Family Medicine 2 <sup>nd</sup> Year Resident in Family Medicine 3 <sup>rd</sup> Year Resident in Family Medicine 4 <sup>th</sup> Year Resident in Family Medicine	
	Medical Resident - Other	1 <sup>st</sup> Year Resident (exc.Obs/Gynae) 2 <sup>nd</sup> Year Resident (exc.Obs.& Gynae) 3 <sup>rd</sup> Year Resident (exc.Obs.& Gynae) 4 <sup>th</sup> Year Resident (exc.Obs.& Gynae) 5 <sup>th</sup> Year Resident (exc.Obs.& Gynae) 1 <sup>st</sup> Year Resident in Comm'y Medicine 2 <sup>nd</sup> Year Resident in Comm'y Medicine 3 <sup>rd</sup> Year Resident in Comm'y Medicine 4 <sup>th</sup> Year Resident in Comm'y Medicine	
	General Practitioner (GP)	General Practitioner (GP)	Head of Health Centre Acting Head of Health Centre Chief of Health Centre Assistant Chief of Health Centre Head of Centre Acting Head of Health Centre Female Chief
DENTISTS	Dental Surgeon	Dentistry Specialist Dental Surgeon	Head of Dental Dept
	Dentist	Dentist Oral Health & Dental Physician	
	Qualified Dental Resident	Qualified Dental Resident	
	Dental Resident	1 <sup>st</sup> Year Resident Dentist 2 <sup>nd</sup> Year Resident Dentist 3 <sup>rd</sup> Year Resident Dentist 4 <sup>th</sup> Year Resident Dentist	
NURSES	Registered Nurse	Degree Nurse (BSN) Registered Nurse	Staff Nurse Male Staff Nurse Head of Public Health Nursing Section Nursing Supervisor Asst Nursing Supervisor Female Qualified Nurse Male Qualified Nurse



<b>GROUP</b>	<b>CATEGORIES FOR PLAN</b>	<b>PROFESSIONS INCLUDED</b>	<b>TITLES INCLUDED</b>
NURSES continued	Associate Nurse	Associate Nurse (2 year trg)	
	Midwife	Degree Nurse/Midwife 3-year Diploma in Reg.Midwifery	Head of Maternity Section Qualified Midwife Asst Qualified Midwife
	Asst Nurse	Assistant Nurse	Female Asst Nurse Male Asst Nurse
PHARMACY STAFF	Pharmacist	Pharmacist	Head of Hospital Pharmacy Dept Pharmacy Inspector Pharmacy Chief Specialist
	Assistant Pharmacist	Assistant Pharmacist	
LABORATORY STAFF	Laboratory Technician	Laboratory Technician Chemistry Technician	Head of Public Health Laboratories Section Head of Diagnostic Laboratories Section Medical Genetic Technician
	Asst. Laboratory Technician	Asst. Laboratory Tech.	
X-RAY STAFF	X-Ray Technologist	X-Ray Technician Radiotherapy Technician Nuclear Med Technician	Nuclear Energy Expert Nuclear Technician Radio Active Expert X-Ray treatment technician Asst X-Ray technician X-Ray Assistant
OTHER TECHNICIANS	Other Technicians	Maxillo-Facial Technician Dental Hygienist Anaesthesia Technician Cardiology Tech (ECG Technician) Neurology Tech (ECT Technician) Forensic Technician Dialysis Technician Audiology Technician Physicist Physiotherapist/Occup'al Therapist Artificial Limb Technician Optical Technician Sign Language Technician	Head of Nutrition Dept Head of Nutrition Section Audio Technician Deaf Interpreter Psychologist and Social Worker Female Social Worker Health Educator Female Health Assistant Male Health Assistant Brian Scanning Technician Asst Heart Scanning Technician Asst Nutrition Asst Female Nutritionist Male Nutritionist

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
OTHER TECHNICIANS Continued	Other Technicians	Speech and Sound Technician Dietician/Dietary Technician Vet Health Assistant Head of Natural Treatment Dept Head of Specialised Clinics Head of National Health Psychology	Nutrition Supervisor Physiotherapy technician Rehabilitation technician Asst Physiotherapy technician Plastic Parts technician Asst Plastic Parts technician Female laboratory Engineer Chemical Engineering Technician Artificial Ear Technician Eyeglasses Technician Teeth and Mouth Health Technician Asst Dental Technician Teeth Health Guide Teeth Mechanic
ENVIRONMENTAL HEALTH	Environmental Health Staff	Health Inspector Prof & Environmental Health Tech General Health Technician Malaria and Bilharzia Technician Blood Testing Technician Insect Technician	Head of Environmental Control Section Head of Industrial Health Section Public Health Technician Malaria Inspector Malaria Operations Inspector Malaria Explorer Malaria Supervisor
ENGINEERING	Engineer	Civil Engineer Architectural Engineer Electrical Engineer IT Engineer Medical Equipment Engineer Chemical Engineer Biotechnology Engineer Mechanical Engineer Health Engineer Agricultural Engineer Hydrology Engineer Assistant Engineer	Head of Health Engineering Section Health Engineer Architect Pharmacy Science Engineer Operating Systems Engineer Electronic Engineer Male/Female Assistant Engineer X-Ray Equipment Maintenance Technician Medical Equipment Maintenance Technician Dental Machinery Maintenance Technician

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
TEACHERS	Teacher	Teacher	
ADMINIS- TRATION	Senior Manager	General Secretary Asst. General Secretary Director Manager	General Secretary for Technical Affairs General Secretary for Admin and Finance General Secretary Deputy General Secretary Asst General Secretary for Supplies & Services Consultant to General Secretary for Technical Consultant to General Secretary for Admin. Assistant General Secretary Asst General Secretary for Technical Asst General Secretary for Finance Asst Secretary for Planning and Development Asst Secretary for Hospitals & Health Centres Asst Secretary for Health Care Minister's Consultant for Emergency Director for Int'al Health & Ext'al Relations Director of Health Insurance Director for Pharmacy and Medical Control Director of Supplies Director of Planning, Trg and Research Director for Planning & Development of HR Human Resources Director Director of Health Issues Primary Health Care Director Primary Health Care Consultant General Director Hospital Director Health Director Chief Specialist Acting Chief Specialist Manager in Charge Project Manager

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
ADMINIS- TRATION cont.	Middle Level Manager	Chief/Head of Dept Asst/Deputy Head of Dept Manager Assistant Manager	Head of National Health Psychology Female College Director College Principal/Institute Director Female Nursing Director Female Director/Manager Male Nursing Asst. School Principal Head of Blood Transfusion Centres Head of Institutes & Vocational Licensing Dept Head of Medical Rehabilitation Dept. Head of Urgent Health Care Department Head of Planning Dept Head of Education & Training Dept Head of Biological Statistics Dept Head of Documentation & Libraries Dept Head of Studies & Research Dept Head of Health Centres Head of Audio Department Head of Nursing Dept. Acting Head of Nursing Dept. Head of Personnel Dept. Head of External Public Relations Dept. Head of Department Head of Building Maintenance Dept Head of Mechanic & Transport Dept. Head of Financial Affairs Dept. Head of Drug Register Dept. Head of Pharmacy Dept. Head of Inspection & Follow-up Dept. Head of Dangerous Drugs Dept Head of Drug Control & Scientific Res.Dept Head of Poisoning Information Dept. Head of Laboratory Drug Control

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
ADMINIS-TRATION cont.	Middle Level Manager continued		Head of Equipment Dept Head of Trust & Receipt Dept Head of Storage Dept. Head of Auditing Dept Head of Hospitals Department Acting Technical Manager Deputy Technical Manager Deputy General Director Deputy Financial Manager Project Manager Deputy Director Deputy Technical Manager Acting Participant Affairs Manager Acting Deputy Manager Acting Head of Department Assistant Health Director Asst. Health Director for Admin. Affairs Assistant/Medical Services Head of Medico Legal Department Head of Dental Department Head of Laboratories Department Head of Vaccines Department
	First Level Manager	Chief/Head of Section Chief of branch Deputy Asst Acting Manager	Asst.Manager of Admin. & Financial Affairs Deputy Asst. Gen'al Manager for Supplies Head of general health improvement section Head of Environmental section Chief of Services Section Chief of Public Health Upgrading Section Chief of Environmental Health Section Chief of Fighting Contagious Diseases Section Chief of Malaria & Bilharzia Section

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
ADMINIS- TRATION cont.	First Level Manager continued		Chief of Health Education Branch Chief of School Health Section Chief of Health Mobile/Car Clinics Section Chief of Non-Contagious Diseases Section Chief of Higher Medical Committee Chief of Medical Committees Section Head of Medical Committees Section Head of Minister's Office Acting Technical Manager Acting Participant Affairs Manager Acting Deputy Manager Acting Head of Department Admin. Asst. for the Health Director
	Technical Administrator	Systems Analyst/Programmer Economist Accountant Auditor Estimator of Quantities Media/Public Relations/Journalist Registered Lawyer Legal Services Officer Translator Photographer Librarian	Legal Advisor/Consultant Programmer Surveyor Designer Journalist Asst. Accountant Asst. Programmer
	Clerical	Chief Clerk Health Directorate Chief Clerk Hospital Chief Clerk Secretary/Medical Records Clerk Computer Technician Data entry clerk	Chief Clerk Medical Register Supervisor Cashier Computer Operator Information Operator and Administrator Asst Statistics Technician Male clerk

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
ADMINIS- TRATION cont.	Clerical Continued		Chief Clerk Medical Register Supervisor Cashier Computer Operator Information Operator and Administrator Asst Statistics Technician Male clerk Female Clerk Equipment Clerk Male Secretary Female Secretary Male Typist Female Typist Admin. Asst. for the Health Director Female Typist Quantity Manager Insurance Representative Secretary and Medical Records Statistics Technician
ANCILLARY (SUPPORT STAFF)	Ancillary Staff	Stores Controller Housekeeper Telephone Operator Telecommunications Technician Switchboard Operator Cable Operator Receptionist Calligrapher/Artist Security Officer Driver Barber Nursery Supervisor Labour Supervisor Unqualified Nurse	Head Driver Unqualified Nurse/Nurse Aide Nursery Supervisor Baby sitter Accommodation services supervisor Storekeeper Stores Officer Trust Officer Fuel Officer Laborer Supervisor Building Supervisor Heating Supervisor Plumber Electrician

GROUP	CATEGORIES FOR PLAN	PROFESSIONS INCLUDED	TITLES INCLUDED
ANCILLARY (SUPPORT STAFF)	Ancillary Staff continued	Female Nursing Laborer Male Nursing Laborer	Technical Supervisor Male/Female Asst Supervisor Handling Supervisor Asst Supervisor Sales Representative Painter Engrosser Agricultural Loans Collector Engine Starting Technician Heating Technician Asst Heating Technician Car Maintenance Technician Mechanic Heating Mechanic Photocopy Machine Maintenance Technician Computer Maintenance Technician Switchboard Maintenance Officer Asst Mechanic Maintenance Technician Car Maintenance Officer Technician Air conditioning Technician Chief of Drivers Fuel Officer Driver Cyclist Shoemaker Painter Carpenter Male Telephonist Female Telephonist Aluminium Maintenance Technician Gymnastic Equipment Maintenance Technician



# ANNEX 3 SUMMARY OF STAFF-IN-POST IN NOVEMBER 2004 BY HEALTH DIRECTORATE

## Summary of Staff-in-Post in November 2004 - Capital Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		Comp.	Primary	MCH		Village		M	F	Total								
M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total				
Doctors	Specialist - Obs/Gyn	1				3	3							4	3	7		
	Specialist - Fam.Med	3	1			5	14		1					8	16	24		
	Specialist - Other	6				20	9	1	1					27	10	37		
	Sub-Total: Specialists	10	1			28	26	1	2					39	29	68		
	Qual.Med Resident					8	3	1	1					9	4	13		
	Med Res -Obs/Gyn																	
	Med Res -Fam.Med																	
	Med Res –Others	4				1	1	3						8	1	9		
	Sub-Total: Med. Res.	4				9	4	4						17	5	22		
	GP	6	3			29	21	57	23					92	47	139		
	TOTAL DOCTORS	20	4			66	51	62	25					148	81	229		
Dental	Dental Surgeon	1				8	4							9	4	13		
	Dentist	1	2			9	28	16	19					26	49	75		
	Qual.Dental Res.						1								1	1		
	Dental Resident																	
	TOTAL DENTISTS	2	2			17	33	16	19					35	54	89		
Nurses	Registered Nurse	2	5			1	13		3					3	21	24		
	Associate Nurse		1												1	1		
	Associate Midwife		24				15		16		2				57	57		
	Asst Nurse	1	24			14	21	17	19				1	32	65	97		
	TOTAL NURSES	3	54			15	49	17	38					35	144	179		
Pharmacy Staff	Pharmacist	1	9				3							1	12	13		
	Asst. Pharmacist	11	9			12	24	27	27					50	60	110		
	TOTAL PHARMACY	12	18											51	72	123		
Lab. Staff	Laboratory Tech.	2	1				3							2	4	6		
	Asst. Lab.Tech.	2	8			6	13	3						11	21	32		
	TOTAL LAB.	4	9			6	16	3						13	25	38		

Summary of Staff-in-Post in November 2004 - Capital Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		Comp.	Primary	MCH		Village		M	F	Total								
M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total				
X-Ray Staff	X-Ray Technician	3	1			5	5							8	6	14		
Other Techs	Other Technicians	6	10			10	16	2	5					18	31	49		
Env'al Hlth	Env'al Hlth. Staff	33	4			10		12						55	4	59		
Engineers	Engineers	1	1			1		1						3	1	4		
Teachers	Teachers																	
Mgmt & Admin Staff	Senior Managers	1																
	Mid-Level Managers	7	1											7	1	8		
	1st Level Managers	1												1		1		
	Tech. Administrators	7	9			12	7	11	19	1				31	35	66		
	Clerical	18	40			10	27	12	33				1	40	101	141		
	Total Admin. Staff	33	50			22	34	23	52	1			1	79	137	216		
Ancillary	Ancillary Staff	64	45			53	64	67	100		2	1	1	185	212	397		
TOTAL STAFF		181	198			205	268	203	239	1	2	1	2	630	767	1,397		

Included under Health Directorate are staff working in Peoples' Console Clinic

## Summary of Staff-in-Post in November 2004 - East Amman Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		Comp.	Primary	MCH		Village		M	F	Total								
M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total				
Doctors	Specialist – Obs/Gyn			5	1	1								6	1	7		
	Specialist – Fam.Med						1								1	1		
	Specialist - Other	1		32		6		1						40		40		
	Sub-Total: Specialists	1		37	1	7	1	1						46	2	48		
	Qual.Med Resident	1		5		2	1		2					8	3	11		
	Med Res -Obs/Gyn																	
	Med Res -Fam.Med							1						1		1		
	Med Res -Others	4		7	2	1		1						13	2	15		
	Sub-Total: Med. Res.	5		12	2	3	1	2	2					22	5	27		
	GP	2	1	14		8	2	41	3	1		1		67	6	73		
	TOTAL DOCTORS	8	1	63	3	18	4	44	5	1				135	13	148		
Dental Doctors	Dental Surgeon			3										3		3		
	Dentist			1		5		12	5					18	5	23		
	Qual.Dental Res.																	
	Dental Resident																	
	TOTAL DENTISTS			4		5		12	5					21	5	26		
Nurses	Registered Nurse		4	47	39	2			3					49	46	95		
	Associate Nurse			25	22									25	22	47		
	Associate Midwife		7		18		3		14						42	42		
	Asst Nurse		6	1	10	1	2	1	8					3	26	29		
	TOTAL NURSES		17	73	89	3	5	1	25					77	136	213		
Pharmacy Staff	Pharmacist	1	2	1	2									2	4	6		
	Asst. Pharmacist	5	2	6	9	5	2	15	12					31	25	56		
	TOTAL PHARMACY	6	4			5	2	15	12					33	29	62		
Lab. Staff	Laboratory Tech.	1		11	1		1							12	2	14		
	Asst. Lab.Tech.	1				2	8	4	5					7	13	20		
	TOTAL LAB.	2				2	9	4	5					19	15	34		

## Summary of Staff-in-Post in November 2004 - East Amman Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
<b>X-Ray Staff</b>	X-Ray Technician	2		8	4									10	4	14
<b>Other Techs</b>	Other Technicians		1	15	11	2	3							17	15	32
<b>Env'al Hlth.</b>	Env'al Hlth. Staff	13		2		9		5	2					29	2	31
<b>Engineers</b>	Engineers		1												1	1
<b>Teachers</b>	Teachers															
<b>Mgmt &amp; Admin Staff</b>	Senior Managers	1		1												
	Mid-Level Managers	1		9	4									10	4	14
	1st Level Managers	5												5		5
	Tech. Administrators	3	1	11	5	5	1	11	5				1	30	13	43
	Clerical	5	13	5	7	7	7	8	11				1	25	39	64
	<b>Total Admin. Staff</b>	<b>15</b>	<b>14</b>	<b>26</b>	<b>16</b>	<b>12</b>	<b>8</b>	<b>19</b>	<b>16</b>				<b>2</b>	<b>70</b>	<b>56</b>	<b>126</b>
<b>Ancillary</b>	Ancillary Staff	27	8	23	3	27	25	57	65		4	4	14	138	119	257
<b>TOTAL STAFF</b>		<b>73</b>	<b>46</b>	<b>214</b>	<b>126</b>	<b>83</b>	<b>56</b>	<b>157</b>	<b>135</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>16</b>	<b>549</b>	<b>395</b>	<b>944</b>

*Includes Dr Jameel Al-Totani Hospital*

## Summary of Staff-in-Post in November 2004 -Madaba Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Doctors	Specialist - Obs/Gyn			7	1										7	1	8	
	Specialist - Fam.Med										1					1	1	
	Specialist - Other	2		31	1										33	1	34	
	Sub-Total: Specialists	2		38	2						1				40	3	43	
	Qual.Med Resident			15	1										15	1	16	
	Med Res -Obs/Gyn			1											1		1	
	Med Res -Fam.Med																	
	Med Res -Others							2							2		2	
	Sub-Total: Med. Res.			16	1			2							18	1	19	
	GP	1	2	21	4	3		15	14		1	1			41	21	62	
	TOTAL DOCTORS	3	2	75	7	3		17	14		2	1			99	25	124	
Dental Doctors	Dental Surgeon																	
	Dentist		1			1	2	3	10						4	13	17	
	Qual.Dental Res.																	
	Dental Resident																	
	TOTAL DENTISTS		1			1	2	3	10						4	13	17	
Nurses	Registered Nurse		2	25	46				1						25	49	74	
	Associate Nurse			6	16										6	16	22	
	Associate Midwife		7		31		1		8		1					48	48	
	Asst Nurse	5	32	13	62	1	4	4	27		1	1	1		24	127	151	
	TOTAL NURSES	5	41	44	155	1	5	4	36		2	1	1		55	240	295	
Pharmacy Staff	Pharmacist		2	2	3										2	5	7	
	Asst. Pharmacist	3	10	10	6	2	1	4	4						19	21	40	
	TOTAL PHARMACY	3	12	12	9	2	1	4	4						21	26	47	
Lab. Staff	Laboratory Tech.	1		3	3										4	3	7	
	Asst. Lab.Tech.	2	4	11	6	1		2	2						16	12	28	
	TOTAL LAB.	3	4	14	9	1		2	2						20	15	35	

# Summary of Staff-in-Post in November 2004 -Madaba Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
<b>X-Ray Staff</b>	X-Ray Technician			12	1									12	1	13
<b>Other Techs</b>	Other Technicians	1	2	13	5	1		1	3					16	10	26
<b>Env'al Hlth</b>	Env'al Health Staff	8	1	2	1									10	2	12
<b>Engineers</b>	Engineers	1	3	2	1									3	4	7
<b>Teachers</b>	Teachers															
<b>Mgmt &amp; Admin Staff</b>	Senior Managers	1		2										3		3
	Mid-Level Managers	9	1	1	1									10	2	12
	1st Level Managers	1												1		1
	Tech. Administrators	3	4	6	9	1	1	6	8					16	22	38
	Clerical	4	25	13	31		4	5	21					22	81	103
	<b>Total Admin. Staff</b>	<b>18</b>	<b>30</b>	<b>22</b>	<b>41</b>	<b>1</b>	<b>5</b>	<b>11</b>	<b>29</b>					<b>52</b>	<b>105</b>	<b>157</b>
<b>Ancillary</b>	Ancillary Staff	51	20	44	37	4	12	23	37	1	1		1	123	108	231
<b>TOTAL STAFF</b>		<b>93</b>	<b>116</b>	<b>240</b>	<b>266</b>	<b>14</b>	<b>25</b>	<b>65</b>	<b>135</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>415</b>	<b>549</b>	<b>964</b>

The Health Directorate staff include staff working in the Chest Disease (6)

## Summary of Staff-in-Post in November 2004 - Zarqa Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
Doctors	Specialist - Obs/Gyn	1		20	3	1		1						23	3	26		
	Specialist - Fam.Med	2				1	1							3	1	4		
	Specialist - Other	1		112	6	2		1			1			116	7	123		
	Sub-Total: Specialists	4		132	6	4	1	2			1			142	8	150		
	Qual.Med Resident			40	1	3								43	1	44		
	Med Res -Obs/Gyn			7	6									7	6	13		
	Med Res -Fam.Med					1								1		1		
	Med Res -Others	2		52	4	2		1						57	4	61		
	Sub-Total: Med. Res.	2		99	11	6		1						108	11	119		
	GP	5		14		17	3	43	12		1			79	16	95		
	TOTAL DOCTORS	11		245	17	27	4	46	12		2			329	35	364		
Dental Doctors	Dental Surgeon	1		4	1									5	1	6		
	Dentist	2	1	3		4	5	6	13					15	19	34		
	Qual.Dental Res.																	
	Dental Resident																	
	TOTAL DENTISTS	3	1	7	1	4	5	6	13					20	20	40		
Nurses	Registered Nurse		3	62	191	4	2	2	2		1			68	199	267		
	Associate Nurse			9	45									9	45	54		
	Associate Midwife		8		59		3		20		2				92	92		
	Asst Nurse	2	16	23	112	1	12		27		1	5		31	168	199		
	TOTAL NURSES	2	27	94	407	5	17	2	49		4	5		108	504	612		
Pharmacy Staff	Pharmacist	2	2	2	6		1		1					4	10	14		
	Asst. Pharmacist	5	3	17	14	6	2	19	17		1	1		48	37	85		
	TOTAL PHARMACY	7	5	19	20	6	3	19	18		1	1		52	47	99		
Lab. Staff	Laboratory Tech.			3	9									3	9	12		
	Asst. Lab.Tech.	14	8	30	12	5	6	3	3					52	29	81		
	TOTAL LAB.	14	8	33	21	5	6	3	3					55	38	93		

## Summary of Staff-in-Post in November 2004 - Zarqa Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician		3	19	5	5	1							24	9	33
Other Techs	Other Technicians	3	5	41	23	2	7	2	11		1			48	47	95
Env'al Hlth	Env'al Health Staff	27	6	1	2	4		14	1			5		51	9	60
Engineers	Engineers	3		8	1									11	1	12
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1		2										3		3
	Mid-Level Managers	9	3	12	4									21	7	28
	1st Level Managers															
	Tech. Administrators	6	8	9	14	5	1	16	10					36	33	69
	Clerical	15	21	9	31	5	3	5	12		1			34	68	102
	Total Admin. Staff	31	32	32	49	10	4	21	22		1			94	108	202
Ancillary	Ancillary Staff	68	7	88	28	20	12	32	42		3	11	2	219	94	313
TOTAL STAFF		169	94	587	574	88	59	145	171		12	22	2	1,011	912	1,923

Note: The Health Directorate staff include staff working in the Regional Blood Bank (13), the Chest Disease Department (8), the Central Laboratory (8)



## Summary of Staff-in-Post in November 2004 - Balqa Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Doctors	Specialist Dr-Obs/Gyn			7	2										7	2	9	
	Specialist Dr-Fam.Med					2	1		1					2	2	4		
	Specialist Dr-Other	1		49	10	1	1	1						52	11	63		
	Sub-Total: Specialists	1		56	12	3	2	1	1					61	15	76		
	Qualified Med Resident			16	2	2								18	2	20		
	Med Res -Obs/Gyn			5	4									5	4	9		
	Med Res -Family Med							1						1		1		
	Med Res -Others	2	1	31	5	1	1							34	7	41		
	Sub-Total: Med. Res.	2	1	52	11	3	1	1						58	13	71		
	GP	6		9	2	6	4	22	8					43	14	57		
TOTAL DOCTORS	9	1	117	25	12	7	24	9					162	42	204			
Dental Doctors	Dental Surgeon			4				1		1				6		6		
	Dentist		1			1	5	6	21			1		8	27	35		
	Qual.Dental Resident																	
	Dental Resident																	
	TOTAL DENTISTS		1			1	5	7	21					14	27	41		
Nurses	Registered Nurse	1		29	91		3	1	4					31	98	129		
	Associate Nurse			5	22									5	22	27		
	Associate Midwife		4		20		7		21		4				56	56		
	Asst Nurse	1	8	34	61	3	17	6	44		2	1		45	132	177		
	TOTAL NURSES	2	12	68	194	3	27	7	69		6	1		81	308	389		
Pharmacy Staff	Pharmacist		5		5		1	1	1					1	12	13		
	Asst. Pharmacist	2	4	11	15	5	4	12	17		1		1	30	42	72		
	TOTAL PHARMACY	2	9	11	20	5	5	13	18		1		1	31	54	85		
Lab. Staff	Laboratory Tech.	1			5				2					1	7	8		
	Asst. Lab.Tech.	3	3	12	4	3	4	2	6	1	1			21	18	39		
	TOTAL LAB.	4	3	12	9	3	4	2	8	1	1			22	25	47		

## Summary of Staff-in-Post in November 2004 - Balqa Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
						Comp.		Primary		MCH		Village						
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total		
X-Ray Staff	X-Ray Technician	1		11	5	3	1	2	1					17	7	24		
Other Techs	Other Technicians	2	2	22	9	2	2	1	5					27	18	45		
Env'al Health	Env'al Health Staff	11	1	1	1	10	1	8			1			30	4	34		
Engineers	Engineers			5	2									5	2	7		
Teachers	Teachers																	
Mgmt & Admin Staff	Senior Managers	1		1										2		2		
	Mid-Level Managers	7	2	10	6									17	8	25		
	Ist Level Managers			6	9									6	9	15		
	Tech. Administrators	4	9	6	9		4	7	16		1			17	39	56		
	Clerical	5	37	5	21	1	15	4	38		3		1	15	115	130		
	Total Admin. Staff	17	48	28	45	1	19	11	54		4		1	57	171	228		
Ancillary	Ancillary Staff	43	25	45	29	17	47	31	144		18	2	1	138	264	402		
TOTAL STAFF		91	102	320	339	57	118	106	329	1	31	3	3	584	922	1,506		

The Health Directorate staff include staff working in the Salt laboratory (1). Balqa Directorate includes the Al-Hussein Hospital in Salt.

## Summary of Staff-in-Post in November 2004 - Dair Alla Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
Doctors	Specialist Dr-Obs/Gyn			3										3		3
	Specialist Dr-Fam.Med															
	Specialist Dr-Other			15										15		15
	<b>Sub-Total: Specialists</b>			18										18		18
	Qualified Med Resident			4										4		4
	Med Res -Obs/Gyn															
	Med Res -Family Med															
	Med Res -Others							1						1		1
	<b>Sub-Total: Med. Res.</b>			4				1						5		5
	GP	1		4				6	3					11	3	14
	<b>TOTAL DOCTORS</b>	1		26				7	3					34	3	37
Dental Doctors	Dental Surgeon															
	Dentist							4						4		4
	Qual.Dental Resident															
	Dental Resident							4						4		4
	<b>TOTAL DENTISTS</b>							8						8		8
Nurses	Registered Nurse			13	13									13	13	26
	Associate Nurse			1	2				1					1	3	4
	Associate Midwife		3		10				5						18	18
	Asst Nurse	1	2	15	21			7	17		2	1	1	24	43	67
	<b>TOTAL NURSES</b>	1	5	29	46			7	23		2	1	1	38	77	115
Pharmacy Staff	Pharmacist				2										2	2
	Asst. Pharmacist	2	2	3	2			4	3					9	7	16
	<b>TOTAL PHARMACY</b>	2	2	3	4			4	3					9	9	18
Lab. Staff	Laboratory Tech.															
	Asst. Lab.Tech.	1	1	6										7	1	8
	<b>TOTAL LAB.</b>	1	1	6										7	1	8

Summary of Staff-in-Post in November 2004 - Dair Alla Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
X-Ray Staff	X-Ray Technician			4	1									4	1	5		
Other Techs	Other Technicians	2		5				1						8		8		
Env'al Health	Env'al Health Staff	3		1				4	2			1		9	2	11		
Engineers	Engineers			2	1									2	1	3		
Teachers	Teachers																	
Mgmt & Admin Staff	Senior Managers	1		1										2		2		
	Mid-Level Managers				2										2	2		
	1st Level Managers	3	1											3	1	4		
	Tech. Administrators	3	2	2	2				4					5	8	13		
	Clerical	2	5		5				4				1	2	15	17		
	Total Admin. Staff	9	8	3	9				8				1	12	26	38		
Ancillary	Ancillary Staff	19	10	20	6			16	15		3		3	55	37	92		
TOTAL STAFF		38	26	99	67			47	54		5	2	5	186	157	343		

Note: Includes Princess Eiman Hospital

## Summary of Staff-in-Post in November 2004 - South Shuneh Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Doctors	Specialist Dr-Obs/Gyn			4										4		4
	Specialist Dr-Fam.Med															
	Specialist Dr-Other			9										9		9
	Sub-Total: Specialists			13										13		13
	Qualified Med Resident			9										9		9
	Med Res -Obs/Gyn															
	Med Res -Family Med															
	Med Res -Others			2										2		2
	Sub-Total: Med. Res.			11										11		11
	GP		1	5				6	1			2		13	2	15
	TOTAL DOCTORS		1	29				6	1			2		37	2	39
Dental Doctors	Dental Surgeon															
	Dentist							3	2					3	2	5
	Qual.Dental Resident															
	Dental Resident															
	TOTAL DENTISTS							3	2					3	2	5
Nurses	Registered Nurse		1	11	12				1					11	14	25
	Associate Nurse		1	5	1									5	2	7
	Associate Midwife		5		10				2						17	17
	Asst Nurse	1	3	11	17			2	6			1	1	15	27	42
	TOTAL NURSES	1	10	27	40			2	9			1	1	31	60	91
Pharmacy Staff	Pharmacist			1										1		1
	Asst. Pharmacist	1	3	2	5			3				1	1	7	9	16
	TOTAL PHARMACY	1	3	3	5			3				1	1	8	9	17
Lab. Staff	Laboratory Tech.			2										2		2
	Asst. Lab.Tech.	1		4	2			1						6	2	8
	TOTAL LAB.	1		6	2			1						8	2	10

Summary of Staff-in-Post in November 2004 -South Shuneh Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician			6										6		6
Other Techs	Other Technicians	1	1	8	1									9	2	11
Env'al Hlth	Env'al Health Staff	3						2						5		5
Engineers	Engineers			1										1		1
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1		1										2		2
	Mid-Level Managers			1	1									1	1	2
	1st Level Managers	2												2		2
	Tech. Administrators	2		1										3		3
	Clerical	3	3	5	4			4	3					12	10	22
	Total Admin. Staff	8	3	8	5			4	3					20	11	31
Ancillary Staff	Ancillary Staff	29	10	29	11			25	16			1	2	84	39	123
TOTAL STAFF		44	28	117	64			46	31			5	4	212	127	339

## Summary of Staff-in-Post in November 2004 - Irbid Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
<b>Doctors</b>	Specialist Dr-Obs/Gyn	2		13	7				1					15	8	23
	Specialist Dr-Fam.Med					7	1		1					7	2	9
	Specialist Dr-Other	7		106	5	1	2	1	1					115	8	123
	<b>Sub-Total: Specialists</b>	<b>9</b>		<b>119</b>	<b>12</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>3</b>					<b>137</b>	<b>18</b>	<b>155</b>
	Qual.Med Resident	3		22	3	4	1	1						30	4	34
	Med Res -Obs/Gyn			12	4										4	4
	Med Res.Family Med			5	2		1							5	3	8
	Med Res -Others	1		86	12			2	1					89	13	102
	<b>Sub-Total: Med. Res.</b>	<b>4</b>		<b>125</b>	<b>21</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>					<b>124</b>	<b>24</b>	<b>148</b>
	GP	10		9	2	5	3	45	8		2		1	69	16	85
	<b>TOTAL DOCTORS</b>	<b>23</b>		<b>253</b>	<b>35</b>	<b>17</b>	<b>8</b>	<b>49</b>	<b>12</b>		<b>2</b>		<b>1</b>	<b>330</b>	<b>58</b>	<b>388</b>
<b>Dental Doctors</b>	Dental Surgeon	1		9				1						11		11
	Dentist	2	4	6	3	2	4	24	17					34	28	62
	Qual.Dental Resident															
	Dental Resident			2										2		2
	<b>TOTAL DENTISTS</b>	<b>3</b>	<b>4</b>	<b>17</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>25</b>	<b>17</b>					<b>47</b>	<b>28</b>	<b>75</b>
<b>Nurses</b>	Registered Nurse	2	6	67	187	2	1	2	9					73	203	276
	Associate Nurse		1	2	54				1					2	56	58
	Associate Midwife		16		51		5		32		8				112	112
	Asst Nurse	12	25	44	138	8	16	8	48		4	4	3	76	234	310
	<b>TOTAL NURSES</b>	<b>14</b>	<b>48</b>	<b>113</b>	<b>430</b>	<b>10</b>	<b>22</b>	<b>10</b>	<b>90</b>		<b>12</b>	<b>4</b>	<b>3</b>	<b>151</b>	<b>605</b>	<b>756</b>
<b>Pharmacy</b>	Pharmacist	3	8	1	10	1	3		1					5	22	27
	Asst. Pharmacist	10	7	17	13	5	5	30	22			6	1	68	48	116
	<b>TOTAL PHARMACY</b>	<b>13</b>	<b>15</b>	<b>18</b>	<b>23</b>	<b>6</b>	<b>8</b>	<b>30</b>	<b>23</b>			<b>6</b>	<b>1</b>	<b>73</b>	<b>70</b>	<b>143</b>
<b>Lab. Staff</b>	Laboratory Tech.	1	2	6	10	1								8	12	20
	Asst. Lab.Tech.	11	16	31	19	3	5	2	1					47	41	88
	<b>TOTAL LAB.</b>	<b>12</b>	<b>18</b>	<b>37</b>	<b>29</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>1</b>					<b>55</b>	<b>53</b>	<b>108</b>

## Summary of Staff-in-Post in November 2004 - Irbid Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
X-Ray Staff	X-Ray Technician	4		35	9	4	2	1	1					44	12	56		
Other Techs	Other Technicians	7	7	44	21			2	3				1	53	32	85		
Env'al Hlth	Env'al Health Staff	60	6	10	1	7		25						102	7	109		
Engineers	Engineers	7	3	5	3									12	6	18		
Teachers	Teachers																	
Mgmt & Admin Staff	Senior Managers	1		3														
	Mid-Level Managers	14	1	15	5									29	6	35		
	1st Level Managers			3	4									3	4	7		
	Tech. Administrators	15	19	32	12	3	1	13	13			2	2	65	47	112		
	Clerical	20	57	30	52	4	7	17	30		1	2	6	73	153	226		
	Total Admin. Staff	50	77	83	73	7	8	30	43		1	4	8	170	210	380		
Ancillary Staff	Ancillary Staff	125	40	119	34	25	15	58	105	1	5	8	11	336	210	546		
TOTAL STAFF		318	218	734	661	82	72	232	295	1	20	22	25	1,373	1,291	2,664		

Note: The Health Directorate staff include staff working in the Central Blood Bank (7), the Chest Diseases Department (18), the central laboratory (35) and the Northern Regional Stores (6)



# Summary of Staff-in-Post in November 2004 - Ramtha Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
Doctors	Specialist Dr-Obs/Gyn			2	1									2	1	3
	Specialist Dr-Fam.Med															
	Specialist Dr-Other			19										19		19
	<b>Sub-Total: Specialists</b>			<b>21</b>	<b>1</b>									<b>21</b>	<b>1</b>	<b>22</b>
	Qual.Med Resident			11				1	1					12	1	13
	Med Res -Obs/Gyn															
	Med Res.Family Med															
	Med Res -Others								1						1	1
	<b>Sub-Total: Med. Res.</b>			<b>11</b>				<b>1</b>	<b>2</b>					<b>12</b>	<b>2</b>	<b>14</b>
	GP	2		7				12	3					21	3	24
	<b>TOTAL DOCTORS</b>	<b>2</b>		<b>39</b>	<b>1</b>			<b>13</b>	<b>5</b>					<b>54</b>	<b>6</b>	<b>60</b>
Dental Doctors	Dental Surgeon															
	Dentist							6	3					6	3	9
	Qual.Dental Resident															
	Dental Resident															
	<b>TOTAL DENTISTS</b>							<b>6</b>	<b>3</b>					<b>6</b>	<b>3</b>	<b>9</b>
Nurses	Registered Nurse	3	1	26	21									29	22	51
	Associate Nurse			1	3				1					1	4	5
	Associate Midwife		1		15				10						26	26
	Asst Nurse	2	4	15	26			7	7					24	37	61
	<b>TOTAL NURSES</b>	<b>5</b>	<b>6</b>	<b>42</b>	<b>65</b>			<b>7</b>	<b>18</b>					<b>54</b>	<b>89</b>	<b>143</b>
Pharmacy Staff Group	Pharmacist	1		1	2									2	2	4
	Asst. Pharmacist	1		5	4			5	6					11	10	21
	<b>TOTAL PHARMACY</b>	<b>2</b>		<b>6</b>	<b>6</b>			<b>5</b>	<b>6</b>					<b>13</b>	<b>12</b>	<b>25</b>
Lab. Staff	Laboratory Tech.								1						1	1
	Asst. Lab.Tech.	1		5	3			6	3					12	6	18
	<b>TOTAL LAB.</b>	<b>1</b>		<b>5</b>	<b>3</b>			<b>6</b>	<b>4</b>					<b>12</b>	<b>7</b>	<b>19</b>

Summary of Staff-in-Post in November 2004 - Ramtha Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
<b>X-Ray Staff</b>	X-Ray Technician			9										9		9
<b>Other Techs</b>	Other Technicians	1		10	2			1						12	2	14
<b>Env'al Hlth</b>	Env'al Health Staff	9						6						15		15
<b>Engineers</b>	Engineers			1										1		1
<b>Teachers</b>	Teachers															
<b>Mgmt &amp; Admin Staff</b>	Senior Managers	1		1												
	Mid-Level Managers			1										1		1
	1st Level Managers	3												3		3
	Tech. Administrators			4				4	8					8	8	16
	Clerical	4	3	6	5			7	7					17	15	32
	<b>Total Admin. Staff</b>	<b>8</b>	<b>3</b>	<b>12</b>	<b>5</b>			<b>11</b>	<b>15</b>					<b>29</b>	<b>23</b>	<b>52</b>
<b>Ancillary</b>		27	1	46	3			35	16					108	20	128
<b>TOTAL STAFF</b>		<b>55</b>	<b>10</b>	<b>170</b>	<b>85</b>			<b>90</b>	<b>67</b>					<b>313</b>	<b>162</b>	<b>475</b>

# Summary of Staff-in-Post in November 2004 - Al-Kura Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
Doctors	Specialist Dr-Obs/Gyn			5											5		5	
	Specialist Dr-Fam.Med																	
	Specialist Dr-Other			14											14		14	
	Sub-Total: Specialists			19											19		19	
	Qual.Med Resident			7											7		7	
	Med Res -Obs/Gyn																	
	Med Res.Family Med																	
	Med Res -Others			3											3		3	
	Sub-Total: Med. Res.			10											10		10	
	GP			5				14	3						19	3	22	
	TOTAL DOCTORS			34				14	3							3	51	
Dental Doctors	Dental Surgeon							1							1		1	
	Dentist		1					6	1						6	2	8	
	Qual.Dental Resident																	
	Dental Resident																	
	TOTAL DENTISTS		1					7	1						7	2	9	
Nurses	Registered Nurse	1	1	26	38										27	39	66	
	Associate Nurse				4											4	4	
	Associate Midwife		2		19				5		2					28	28	
	Asst Nurse	1	5	18	29			6	16						25	50	75	
	TOTAL NURSES	2	8	44	90			6	21		2				52	121	173	
Pharmacy Staff	Pharmacist			1											1		1	
	Asst. Pharmacist	2		7	1			9	3						18	4	22	
	TOTAL PHARMACY	2		8	1			9	3						19	4	23	
Lab. Staff	Laboratory Tech.			2											2		2	
	Asst. Lab.Tech.			4	3			1	1						5	4	9	
	TOTAL LAB.			6	3			1	1						7	4	11	

# Summary of Staff-in-Post in November 2004 - Al-Kura Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
<b>X-Ray Staff</b>	X-Ray Technician			7	1			1						8	1	9
<b>Other Techs</b>	Other Technicians			13	4									13	4	17
<b>Env'al Hlth</b>	Env'al Health Staff	5		1				10						16		16
<b>Engineers</b>	Engineers															
<b>Teachers</b>	Teachers															
<b>Mgmt &amp; Admin Staff</b>	Senior Managers			1												
	Mid-Level Managers	1		2										3		3
	Ist Level Managers	3												3		3
	Tech. Administrators	1	1	7	1			9	2					17	4	21
	Clerical	2	2	5	14			5	7					12	23	35
	<b>Total Admin. Staff</b>	<b>7</b>	<b>3</b>	<b>15</b>	<b>15</b>			<b>14</b>	<b>9</b>					<b>35</b>	<b>27</b>	<b>62</b>
<b>Ancillary</b>		14	3	30	7			35	39			1		80	49	129
<b>TOTAL STAFF</b>		<b>30</b>	<b>15</b>	<b>158</b>	<b>121</b>			<b>97</b>	<b>77</b>		<b>2</b>	<b>1</b>		<b>237</b>	<b>215</b>	<b>500</b>

Note: Includes Princess Raya Hospital

## Summary of Staff-in-Post in November 2004 - Bani Kenanah Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work															
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF			
		M	F	M	F	Comp.		Primary		MCH		Village					
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total	
Doctors	Specialist Dr-Obs/Gyn																
	Specialist Dr-Fam.Med																
	Specialist Dr-Other			17	1									17	1	18	
	Sub-Total: Specialists			17	1									17	1	18	
	Qual.Med Resident			8				1						9		9	
	Med Res -Obs/Gyn																
	Med Res.Family Med																
	Med Res -Others			3				2						5		5	
	Sub-Total: Med. Res.			11				3						14		14	
	GP			7				10	5					17	5	22	
	TOTAL DOCTORS			35	1			13	5					48	6	54	
Dental Doctors	Dental Surgeon			1										1		1	
	Dentist					1		7	4			1		9	4	13	
	Qual.Dental Resident																
	Dental Resident																
	TOTAL DENTISTS			1		1		7	4					10	4	14	
Nurses	Registered Nurse		1	8	28		1							8	30	38	
	Associate Nurse		1		5										6	6	
	Associate Midwife		2		16				16				1		35	35	
	Asst Nurse	2	4	11	12			3	21			1	3	17	40	57	
	TOTAL NURSES	2	8	19	61		1	3	37			1	4	25	111	136	
Pharmacy Staff Group	Pharmacist			1	1									1	1	2	
	Asst. Pharmacist	3	1	5	5			12	8				2	20	16	36	
	TOTAL PHARMACY	3	1	6	6			12	8				2	21	17	38	
Lab. Staff	Laboratory Tech.				1										1	1	
	Asst. Lab.Tech.			9	2	2								11	2	13	
	TOTAL LAB.			9	3	2								11	3	14	

## Summary of Staff-in-Post in November 2004 - Bani Kenanah Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician			11	3									11	3	14
Other Techs	Other Technicians	1		8	3									9	3	12
Env'al Hlth	Env'al Health Staff	5		2		1		15	1					23	1	24
Engineers	Engineers			3										3		3
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers			1												
	Mid-Level Managers	1		2	2									3	2	5
	1st Level Managers	3												3		3
	Tech. Administrators	2	4	9	1			2	10			1		14	15	29
	Clerical	3	3	7	15			5	9				1	15	28	43
	Total Admin. Staff	9	7	19	18			7	19			1	1	35	45	80
Ancillary	Ancillary Staff	15	5	22	1	2	3	18	32			2	2	59	43	102
TOTAL STAFF		35	21	135	96	6	4	75	106			4	9	255	236	491

Includes Al-Yarmouk Hospital

## Summary of Staff-in-Post in November 2004 - Ajlun Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
Doctors	Specialist Dr-Obs/Gyn			4											4		4	
	Specialist Dr-Fam.Med																	
	Specialist Dr-Other			24	1										24	1	25	
	Sub-Total: Specialists			28	1										28	1	29	
	Qual.Med Resident			7											7		7	
	Med Res -Obs/Gyn																	
	Med Res.Family Med																	
	Med Res -Others	1		1	1										2	1	3	
	Sub-Total: Med. Res.	1		8	1										9	1	10	
	GP			7		9		14							30		30	
TOTAL DOCTORS	1		43	2	9		14								2	69		
Dental	Dental Surgeon			2											2		2	
	Dentist					2	2	8	5						10	7	17	
	Qual.Dental Resident																	
	Dental Resident																	
	TOTAL DENTISTS			2		2	2	8	5						12	7	19	
Nurses	Registered Nurse	1	2	32	44	1	1	1	3						35	50	85	
	Associate Nurse			1	8		1								1	9	10	
	Associate Midwife		1		15		6		14				1			37	37	
	Asst Nurse	1	4	21	54	5	8	5	53				11		32	130	162	
	TOTAL NURSES	2	7	54	121	6	16	6	70				12		68	226	294	
Pharmacy Staff	Pharmacist		1		1											2	2	
	Asst. Pharmacist	2		6	1	1	2	14	3				4	1	27	7	34	
	TOTAL PHARMACY	2	1	6	2	1	2	14	3				4	1	27	9	36	
Lab. Staff	Laboratory Tech.		1	4	1										4	2	6	
	Asst. Lab.Tech.			8		3	4	6	1						17	5	22	
	TOTAL LAB.		1	12	1	3	4	6	1						21	7	28	

Summary of Staff-in-Post in November 2004 - Ajlun Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work															TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres													
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total			
X-Ray Staff	X-Ray Technician			7	4	1								8	4	12			
Other Techs	Other Technicians	1		14	3	2	2		1					17	6	23			
Env'al Hlth	Env'al Health Staff	19	3					1	1					20	4	24			
Engineers	Engineers	2		4	1									6	1	7			
Teachers	Teachers																		
Mgmt & Admin Staff	Senior Managers	1		1															
	Mid-Level Managers	3	2	3	4									6	6	12			
	1st Level Managers	4	1	1										5	1	6			
	Tech. Administrators	2	6	5	9	1	5	4	11				4	12	35	47			
	Clerical	4	10	6	16	2	11	4	24				1	16	62	78			
	Total Admin. Staff	14	19	16	29	3	16	8	35				5	39	104	143			
Ancillary		33	10	35	13	26	15	25	51			4	8	123	97	220			
TOTAL STAFF		74	41	193	176	53	57	82	167			8	26	341	467	875			

*Includes Al-Iman Hospital*



## Summary of Staff-in-Post in November 2004 - Jarash Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
Doctors	Specialist Dr-Obs/Gyn			3										3		3		
	Specialist Dr-Fam.Med																	
	Specialist Dr-Other			27				1						28		28		
	Sub-Total: Specialists			30				1						31		31		
	Qualified Med Resident			12	1			1						13	1	14		
	Med Res -Obs/Gyn																	
	Med Res -Family Med							1						1		1		
	Med Res -Others	1		2										3		3		
	Sub-Total: Med. Res.	1		14	1			2						17	1	18		
	GP	2		5	2			23	4					30	6	36		
	TOTAL DOCTORS	3		49	3			26	4					78	7	85		
Dental Doctors	Dental Surgeon																	
	Dentist							6	10					6	10	16		
	Qual.Dental Resident																	
	Dental Resident																	
	TOTAL DENTISTS							6	10					6	10	16		
Nurses	Registered Nurse		1	30	37									30	38	68		
	Associate Nurse			2	4									2	4	6		
	Associate Midwife		3		19				13		1				36	36		
	Asst Nurse	2	3	29	62			14	51			2	5	47	121	168		
	TOTAL NURSES	2	7	61	122			14	64		1	2	5	79	199	278		
Pharmacy Staff	Pharmacist	1	1		2									1	3	4		
	Asst. Pharmacist	2	1	4	4			17	6					23	11	34		
	TOTAL PHARMACY	3	2	4	6			17	6					24	14	38		
Lab. Staff	Laboratory Tech.			1	2									1	2	3		
	Asst. Lab.Tech.	1	3	9	4			5	6					15	13	28		
	TOTAL LAB.	1	3	10	6			5	6					16	15	31		

Summary of Staff-in-Post in November 2004 - Jarash Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician	1		9										10		10
Other Techs	Other Technicians	2		15	5			4	4		1			21	10	31
Env'al Hlth	Env'al Health Staff	13	5					5						18	5	23
Engineers	Engineers	2	1	2										4	1	5
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1		1										2		2
	Mid-Level Managers	4	2	5	1									9	3	12
	1st Level Managers															
	Tech. Administrators	3	1	6	2			9	11					18	14	32
	Clerical	7	8	13	17			4	13					24	38	62
	Total Admin. Staff	15	11	25	20			13	24					53	55	108
Ancillary	Ancillary Staff	28	6	38	14			49	48		1	4	4	119	73	192
TOTAL STAFF		70	35	213	176			139	166		3	6	9	428	389	817

Includes Jarash Hospital

## Summary of Staff-in-Post in November 2004 - Mafrq Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
Doctors	Specialist Dr-Obs/Gyn			9										9		9		
	Specialist Dr-Fam.Med					2								2		2		
	Specialist Dr-Other	2		27	2									29	2	31		
	Sub-Total: Specialists	2		36	2	2								40	2	42		
	Qual.Med Resident			12	1									12	1	13		
	Med Res -Obs/Gyn																	
	Med Res -Family Med																	
	Med Res -Others			5		1		1						7		7		
	Sub-Total: Med. Res.			17	1	1		1						19	1	20		
	GP		2	11		14		25	3			5		55	5	60		
	TOTAL DOCTORS	2	2	64	3	17		26	3			5		114	8	122		
Dental Doctors	Dental Surgeon			2				3						5		5		
	Dentist					5	1	8	5					13	6	19		
	Qual.Dental Resident																	
	Dental Resident																	
	TOTAL DENTISTS			2		5	1	11	5					18	6	24		
Nurses	Registered Nurse	1	3	41	57	1	4	1	3					44	67	111		
	Associate Nurse		2	9	29	3								12	31	43		
	Associate Midwife		1		34		3		17		1		5		61	61		
	Asst Nurse	1	4	12	73	4	16	3	28				18	20	139	159		
	TOTAL NURSES	2	10	62	193	8	23	4	48		1		23	76	298	374		
Pharmacy Staff	Pharmacist	1	2	1	3									2	5	7		
	Asst. Pharmacist	6	7	3	11	2	2	5	7			1		17	27	44		
	TOTAL PHARMACY	7	9			2	2	5	7					14	18	32		
Lab. Staff	Laboratory Tech.		1	4	4									4	5	9		
	Asst. Lab.Tech.	2	6	9	11		3		5				2	11	27	38		
	TOTAL LAB.	2	7	13	15		3		5				2	15	32	47		

Summary of Staff-in-Post in November 2004-Mafraq Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician	2	1	12	4	2								16	5	21
Other Techs	Other Technicians	2	1	18	7			2	4					22	12	34
Env'al Hlth	Env'al Health Staff	16	5		2			2				1		19	7	26
Engineers	Engineers	1		4	2									5	2	7
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1		2										3		3
	Mid-Level Managers	10		2	2									12	2	14
	Ist Level Managers															
	Tech. Administrators	1	5	5	6		1		4				2	6	18	24
	Clerical	6	21	3	26	1	3	5	10			1		16	60	76
	Total Admin. Staff	18	26	12	34	1	4	5	14			1	2	37	80	117
Ancillary	Ancillary Staff	58	17	37	22	21	16	24	72		3	5	28	145	158	303
TOTAL STAFF		110	78	224	282	56	49	79	158		4	12	55	481	626	1,107

Note: The Health Directorate staff include staff working in the chest disease centre (17). Hospital staff include those at Al-Mafraq Hospital and the Gynaecology & Paediatrics Hospital

## Summary of Staff-in-Post in November 2004 - North Badiah Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Doctors	Specialist Dr-Obs/Gyn			2										2		2
	Specialist Dr-Fam.Med															
	Specialist Dr-Other			7										7		7
	Sub-Total: Specialists			9										9		9
	Qual.Med Resident															
	Med Res -Obs/Gyn															
	Med Res.Family Med															
	Med Res -Others			1				1						2		2
	Sub-Total: Med. Res.			1				1						2		2
	GP			7		9		16						32		32
	TOTAL DOCTORS			17		9		17						43		43
Dental Doctors	Dental Surgeon															
	Dentist			2		4		3						9		9
	Qual.Dental Resident															
	Dental Resident															
	TOTAL DENTISTS			2		4		3						9		9
Nurses	Registered Nurse	1		9	1	2	1		1					12	3	15
	Associate Nurse			5	3		3	1						6	6	12
	Associate Midwife		3		4		2		7						16	16
	Asst Nurse	1	4	1		1	9	5	22			5	8	13	43	56
	TOTAL NURSES	2	7	15	8	3	15	6	30			5	8	31	68	99
Pharmacy Staff	Pharmacist			1										1		1
	Asst. Pharmacist		1	2		4	1	3	2			1		10	4	14
	TOTAL PHARMACY		1	3		4	1	3	2			1		11	4	15
Lab. Staff	Laboratory Tech.															
	Asst. Lab.Tech.				2	2	1	1						3	3	6
	TOTAL LAB.				2	2	1	1						3	3	6

Summary of Staff-in-Post in November 2004 - North Badiah Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician	1		4	1	3								8	1	9
Other Techs	Other Technicians		1	5										5	1	6
Env'al Hlth	Env'al Health Staff	2	1	2		1	1	5	1					10	3	13
Engineers	Engineers		1	2										2	1	3
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1		1												
	Mid-Level Managers			2										2		2
	1st Level Managers	3												3		3
	Tech. Administrators		1	1			1	1						2	2	4
	Clerical		3	2	3	1	2	3					1	6	9	15
	Total Admin. Staff	4	4	6	3	1	3	4					1	13	11	24
Ancillary	Ancillary Staff	7	1	11		13	8	19	27			1	16	51	52	103
TOTAL STAFF		16	16	67	14	40	29	58	60			7	25	186	144	330

Includes Al-Rueshid Hospital

## Summary of Staff-in-Post in November 2004 - Karak Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
	Specialist Dr-Obs/Gyn			4										4		4
	Specialist Dr-Fam.Med															
	Specialist Dr-Other	1		44	2	2								47	2	49
	<b>Sub-Total: Spec. Drs</b>	<b>1</b>		<b>48</b>	<b>2</b>	<b>2</b>								<b>51</b>	<b>2</b>	<b>53</b>
	Qual.Med Resident			21		1								22		22
	Med Res -Obs/Gyn			4	1									4	1	5
	Med Res.Family Med															
	Med Res -Others	2	1	15				1	1					18	2	20
	<b>Sub-Total: Med. Res.</b>	<b>2</b>		<b>40</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>1</b>					<b>44</b>	<b>3</b>	<b>47</b>
	GP	4	1	29	2	12		38	1		2			83	6	89
	<b>TOTAL DOCTORS</b>	<b>7</b>	<b>1</b>	<b>117</b>	<b>5</b>	<b>15</b>		<b>39</b>	<b>2</b>		<b>2</b>			<b>178</b>	<b>11</b>	<b>189</b>
<b>Dental Doctors</b>	Dental Surgeon					3								3		3
	Dentist					6	6	10	8					16	14	30
	Qual.Dental Resident															
	Dental Resident															
	<b>TOTAL DENTISTS</b>					<b>9</b>	<b>6</b>	<b>10</b>	<b>8</b>					<b>19</b>	<b>14</b>	<b>33</b>
<b>Nurses</b>	Registered Nurse		2	34	56	2	4		6		1			36	69	105
	Associate Nurse			8	7									8	7	15
	Associate Midwife		2		30		7		39		6				84	84
	Asst Nurse	2	17	25	122	1	42	3	161		6	1	17	32	365	397
	<b>TOTAL NURSES</b>	<b>2</b>	<b>21</b>	<b>67</b>	<b>215</b>	<b>3</b>	<b>53</b>	<b>3</b>	<b>206</b>		<b>13</b>	<b>1</b>	<b>17</b>	<b>76</b>	<b>525</b>	<b>601</b>
<b>Pharmacy Staff</b>	Pharmacist	2		2	2		3							4	5	9
	Asst. Pharmacist	2	1	12	6	4	4	8	16					26	27	53
	<b>TOTAL PHARMACY</b>	<b>4</b>	<b>1</b>	<b>14</b>	<b>8</b>	<b>4</b>	<b>7</b>	<b>8</b>	<b>16</b>					<b>30</b>	<b>32</b>	<b>62</b>
<b>Lab. Staff</b>	Laboratory Tech.	2	3	3	3									5	6	11
	Asst. Lab.Tech.	5	9	15	5	3	1		1					23	16	39
	<b>TOTAL LAB.</b>	<b>7</b>	<b>12</b>	<b>18</b>	<b>8</b>	<b>3</b>	<b>1</b>		<b>1</b>					<b>28</b>	<b>22</b>	<b>50</b>

## Summary of Staff-in-Post in November 2004 - Karak Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres												
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total		
X-Ray Staff	X-Ray Technicians	1		15	2	4	1							20	3	23		
Other Techs	Other Technicians		2	17	10	11	4						1	28	17	45		
Env'al Hlth	Env'al Health Staff	5	3	1		4	3	5	4					15	10	25		
Engineers	Engineers	2	1	7	3									9	4	13		
Teachers	Teachers																	
Mgmt & Admin Staff	Senior Managers	1		2										3		3		
	Mid-Level Managers	13		5	2									18	2	20		
	Ist Level Managers																	
	Tech. Administrators	6	5	8	8	2	8	7	16		1		1	23	39	62		
	Clerical	5	28	13	34	8	20	9	28		3	1	3	36	116	152		
	Total Admin. Staff	25	33	28	44	10	28	16	44		4	1	4	80	157	237		
Ancillary	Ancillary Staff	25	15	50	37	43	70	42	167		10	10	15	170	314	484		
TOTAL STAFF		78	89	334	332	106	173	123	448		29	12	37	653	1,109	1,762		

Note: The Health Directorate staff include staff working in the Regional Blood Bank (10), the Chest Disease Department (14), the Central Laboratory (12)



## Summary of Staff-in-Post in November 2004 - Tafieleh Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		Comp.	Primary	MCH	Village											
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Doctors	Specialist Dr-Obs/Gyn															
	Specialist Dr-Fam.Med															
	Specialist Dr-Other															
	Sub-Total: Specialists															
	Qual.Med Resident	1												1		1
	Med Res -Obs/Gyn	1														
	Med Res.Family Med															
	Med Res -Others	3												3		3
	Sub-Total: Med. Res.	5												4		4
	GP	3				10		13						26		26
	TOTAL DOCTORS	8				10		13						30		30
Dental Doctors	Dental Surgeon	1												1		1
	Dentist		2			4		8	2					12	4	16
	Qual.Dental Resident															
	Dental Resident															
	TOTAL DENTISTS	1	2			4		8	2					13	4	17
Nurses	Registered Nurse		4			2	5	1	14				1	3	24	27
	Associate Nurse															
	Associate Midwife		2				7		18				3		30	30
	Asst Nurse	2	4			10	20	4	34			2	6	18	64	82
	TOTAL NURSES	2	10			12	32	5	66			2	10	21	118	139
Pharmacy Staff	Pharmacist					1	3							1	3	4
	Asst. Pharmacist	2	5			3	1	5	2					10	8	18
	TOTAL PHARMACY	2	5			4	4	5	2					11	11	22
Lab. Staff	Laboratory Tech.		1												1	1
	Asst. Lab.Tech.	2	1			4	3	1	3					7	7	14
	TOTAL LAB.	2	2			4	3	1	3					7	8	15

## Summary of Staff-in-Post in November 2004 - Tafieleh Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
						Comp.		Primary		MCH		Village				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician	1				4		2						7		7
Other Techs	Other Technicians	1				1		1						3		3
Env'al Health	Env'al Health Staff	9	1			2		5						16	1	17
Engineers	Engineers	1												1		1
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1														
	Mid-Level Managers	3	3											3	3	6
	Ist Level Managers	2												2		2
	Tech. Administrators	2	4			5	3	10	2					17	9	26
	Clerical	5	13			3	4	4	9					12	26	38
	Total Admin. Staff	13	20			8	7	14	11					34	38	72
Ancillary	Ancillary Staff	37	7			29	15	27	17			8	2	101	41	142
TOTAL STAFF		77	47			78	61	81	101			10	12	244	221	465

Note: The Health Directorate staff include staff working in the Chest Disease Department (1).

## Summary of Staff-in-Post in November 2004 -Ma'an Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total
<b>Doctors</b>	Specialist Dr-Obs/Gyn			7	1									7	1	8
	Specialist Dr-Fam.Med															
	Specialist Dr-Other	2		26		1								29		29
	<b>Sub-Total: Specialists</b>	<b>2</b>		<b>33</b>	<b>1</b>	<b>1</b>								<b>36</b>	<b>1</b>	<b>37</b>
	Qualified Med Resident	1		17	1									18	1	19
	Med Res -Obs/Gyn															
	Med Res -Family Med															
	Med Res -Others			7	1									7	1	8
	<b>Sub-Total: Med. Res.</b>	<b>1</b>		<b>24</b>	<b>2</b>									<b>25</b>	<b>2</b>	<b>27</b>
	GP	18		24	3	19		27						88	3	91
	<b>TOTAL DOCTORS</b>	<b>21</b>		<b>81</b>	<b>6</b>	<b>20</b>		<b>27</b>						<b>149</b>	<b>6</b>	<b>155</b>
<b>Dental Doctors</b>	Dental Surgeon			2										2		2
	Dentist		2	1	1	3	3	5	1					9	7	16
	Qual.Dental Resident															
	Dental Resident															
	<b>TOTAL DENTISTS</b>		<b>2</b>			<b>3</b>	<b>3</b>	<b>5</b>	<b>1</b>					<b>11</b>	<b>7</b>	<b>18</b>
<b>Nurses</b>	Registered Nurse	1		63	45	1	1	4	1					69	47	116
	Associate Nurse	1		24	31									25	31	56
	Associate Midwife		4		29		10		8						51	51
	Asst Nurse		9	7	33	2	10	6	13			1		15	66	81
	<b>TOTAL NURSES</b>	<b>2</b>	<b>13</b>	<b>94</b>	<b>138</b>	<b>3</b>	<b>21</b>	<b>10</b>	<b>22</b>			<b>1</b>		<b>109</b>	<b>195</b>	<b>304</b>
<b>Pharmacy Staff</b>	Pharmacist		1	2	2	1								3	3	6
	Asst. Pharmacist	4	2	4	5	4	5	5	2					17	14	31
	<b>TOTAL PHARMACY</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>					<b>20</b>	<b>17</b>	<b>37</b>
<b>Lab. Staff</b>	Laboratory Tech.			3	2									3	2	5
	Asst. Lab.Tech.	4	7	11	5	5	1	2	1					22	14	36
	<b>TOTAL LAB.</b>	<b>4</b>	<b>7</b>	<b>14</b>	<b>7</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>1</b>					<b>25</b>	<b>16</b>	<b>41</b>

Summary of Staff-in-Post in November 2004 - Ma'an Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work													TOTAL ALL STAFF		
		Health Directorate		Hospital		Health Centres											
		M	F	M	F	Comp.		Primary		MCH		Village		M	F	Total	
X-Ray Staff	X-Ray Technician	4		15	1	4	1	1						24	2	26	
Other Techs	Other Technicians	8		11	4	4			1					23	5	28	
Env'al Hlth	Env'al Health Staff	10	1			4		1						15	1	16	
Engineers	Engineers	1	1	6	1									7	2	9	
Teachers	Teachers																
Mgmt & Admin Staff	Senior Managers	1		2										3		3	
	Mid-Level Managers	9	1	1										10	1	11	
	1st Level Managers																
	Tech. Administrators	1	2	3	5		5	3	1					7	13	20	
	Clerical	2	18	3	9	2	6	3	4					10	37	47	
	Total Admin. Staff	13	21	9	14	2	11	6	5					30	51	81	
Ancillary	Ancillary Staff	26	13	42	10	50	32	53	47					171	102	273	
TOTAL STAFF		93	61	278	188	100	74	110	79				1	584	404	988	

The Health Directorate staff include staff working in the Chest Diseases Center (1)

## Summary of Staff-in-Post in November 2004 -Aqaba Health Directorate

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work															
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF			
		Comp.	Primary	MCH	Village												
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total	
Doctors	Specialist Dr-Obs/Gyn																
	Specialist Dr-Fam.Med																
	Specialist Dr-Other	1				1								2		2	
	Sub-Total: Specilalists	1				1								2		2	
	Qualified Med Resident																
	Med Res -Obs/Gyn																
	Med Res -Family Med																
	Med Res -Others																
	Sub-Total: Med. Res.																
	GP	1				18	2	15						34	2	36	
	TOTAL DOCTORS	2				19	2	15						36	2	38	
Dental Doctors	Dental Surgeon																
	Dentist					4	1	7	3					11	4	15	
	Qual.Dental Resident																
	Dental Resident																
	TOTAL DENTISTS					4	1	7	3					11	4	15	
Nurses	Registered Nurse		4			2	2		6					2	12	14	
	Associate Nurse					1			1					1	1	2	
	Associate Midwife						6		11						17	17	
	Asst Nurse		1				5		9						15	15	
	TOTAL NURSES		5			3	13		27					3	45	48	
Pharmacy Staff	Pharmacist	1												1		1	
	Asst. Pharmacist		4			3	5	3	11					6	20	26	
	TOTAL PHARMACY	1	4			3	5	3	11					7	20	27	
Lab. Staff	Laboratory Tech.	1	3				1							1	4	5	
	Asst. Lab.Tech.	1	4			2	5		6					3	15	18	
	TOTAL LAB.	2	7			2	6		6					4	19	23	

Summary of Staff-in-Post in November 2004 - Aqaba Health Directorate, page 2

Staff Group	Staff Category	Number of Staff-in-Post by Place of Work														
		Health Directorate		Hospital		Health Centres								TOTAL ALL STAFF		
		Comp.	Primary	MCH		Village										
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
X-Ray Staff	X-Ray Technician					3		1						4		4
Other Techs	Other Technicians	17	5			2	1							19	6	25
Env'al Hlth	Env'al Health Staff	18				1								19		19
Engineers	Engineers	3												3		3
Teachers	Teachers															
Mgmt & Admin Staff	Senior Managers	1												1		1
	Mid-Level Managers	7	2											7	2	9
	1st Level Managers															
	Tech. Administrators	2	3			1	1		3					3	7	10
	Clerical	3	8				7		10					3	25	28
	Total Admin. Staff	13	13			1	8		13					14	34	48
Ancillary	Ancillary Staff	14	9			16	17	29	28					59	54	113
TOTAL STAFF		70	43			54	53	55	88					179	184	363

Note: The Health Directorate staff include staff working in the Nourishment laboratory (32)

# ANNEX 4: COST OF HEALTH PROFESSIONS EDUCATION BY INSTITUTION

Program	Credit Hours	Competitive Program Cost /Credit Hour (JD)	Total Cost	Non Competitive* Cost/ Credit Hour (JD)	Total Cost
<b>Jordan University (Basic Degree)</b>					
◊ Physician	255	45	11,475	176.25	44,943
◊ Nurse	126	15	1,890	56.67	7,140
◊ Pharmacist	150	29	4,350	91.67	13,750
◊ Dentist	196	40	7,840	176.25	34,545
◊ Physiotherapist	126	34	4,284	83.3	10,495
◊ Nutrition	138	26	3,588	76.7	10,584
<b>JUST</b>					
◊ Physician	257	36	9,252	150	38,550
◊ Nurse	131	10	1,310	50	6,550
◊ Pharmacist	162	21	3,402	75	12,150
◊ Dentist	213	31	6,603	150	31,950
◊ Physiotherapist	133	32	4,256	50	6,650
◊ Nutrition	132	16	2,112	50	6,600
◊ Midwifery	131	30	3,930	50	6,550
◊ Laboratory Technologist	138	32	4,416	50	6,900
<b>Al Zaytoonah University (Pvt)</b>	132	60	7,920	50 (evening program)	6,600
◊ Nurse	160	70	11,200		
◊ Pharmacist					
<b>Qudesia College (Pvt)</b>	NA	NA	NA	NA	NA
◊ Associate Nurse					
<b>Salt College (Public)</b>	NA	NA	NA	NA	NA
◊ Associate Nurse					
<b>Qurdova (Pvt)</b>	NA	NA	NA	NA	NA
◊ Associate Nurse					

\*The cost per credit hour used for calculating the cost of Jordan University non competitive programs is the average of the cost per credit hour for three programs i.e. international, complementary and evening.

### Detail for Jordan University

<b>Name of Faculty &amp; Departments</b>	<b>The Fees per Credit Hr in (JD) for the (B.Sc.) for Regular Program</b>	<b>The Fees per Credit Hour in (USD) for the (B.Sc.) for International Students</b>	<b>The Fees per Credit Hour in (JD) for Complementary Program</b>	<b>The Fees per Credit Hour in (JD) for Evening Program</b>	<b>The average fees for non competitive in (JD)</b>
<b>Faculty of Agriculture</b>					
Department of Nutrition and Food Technology	26 JD	105 (75 JD)	60	65	76.7
<b>Faculty of Rehabilitation Sciences</b>					
1- Physiotherapy Department	34 JD	140 (100 JD)	100	50	83.3
2- Occupational Therapy	34 JD	140 (100 JD)	100	50	83.3
3- Orthotics and Prosthetics	34 JD	140 (100 JD)	100	50	83.3
4- Speech and Hearing sciences Depart.	34 JD	140 (100 JD)	100	50	83.3
<b>Faculty of Medicine</b>	45 JD	250 (177.5 JD)	175	-	176.25
<b>Faculty of Nursing</b>	15 JD	85 (60 JD)	60	50	56.67
<b>Faculty of Pharmacy</b>	29 JD	140 (100 JD)	100	75	91.67
<b>Faculty of Dentistry</b>	40 JD	250 (177.5 JD)	175	-	176.25



## ANNEX 5: EDUCATION PROGRAM INTAKES AND OUTPUTS BY COURSE AND SCHOOL

### Doctors (6 Years)

Training Institution	Owned By	Intake (I) 1995		Graduates 2001		Intake 1996		Graduates 2002		Intake 1997		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University	MOHE: Public	53	34	52	27	49	41	43	33	60	58	50	39	82%	74%
Jordan University for Science and Technology	MOHE: Public	49	16	42	11	43	30	32	22	56	32	45	24	80%	73%
	Parallel	-	-	-	-	-	-	-	-	111	28	56	10	50%	36%
Mo'ata University started 2001/2002 with 28 student.	Private: MOHE public														

Notes

(I) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Doctors (Internship 1 Year Training)

Training Institution	Owned By (I)	Intake (I) 2000		Graduates 2001		Intake 2001		Graduates 2002		Intake 2002		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Al Basheer Hospital coordinates rotation to the following MOH hospitals: Al Hussein Hospital/Salt. Amera Basma Hosp/Irbid. Zarka Hospital Faisal Hospital/Zarka Kerak Hospital. Sahab(SP) East Amman. Madaba Hospital	MOH	210	31	180	19	262	37	220	30	275	41	237	25	85.2%	67.8%

Notes

(I) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Medical Residency (5 Years)

Training Institution	Owned By	Intake (I) 1996		Graduates 2001		Intake 1997		Graduates 2002		Intake 1998		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
MOH Hospitals: Al Basheer Hosp.& others (orthopaedics)	MOH	7	-	6	-	5	-	5	-	14	-	9	-	76.9%	
MOH Hospitals: Al Basheer & others (ENT ear/nose/throat) 5 year training programme started in 2003	MOH Prog. Started 2003 Intake 7-8 per year 03/04/05														

(1) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Medical Residency (4 years)

Training Institution	Owned By	Intake (I) 1997		Graduates 2001		Intake 1998		Graduates 2002		Intake 1999		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
MOH Hospitals: Al Basheer manages rotation	MOH														
1. Internal Medicine		10	-	10	-	13	-	12	-	23	2	19	2	89%	100%
2. General Surgery		19	-	18	-	19	-	17	-	27	1	19	1	85%	100%
3. Gyn, & Obstetrics		10	11	10	11	13	9	11	8	11	9	11	9	94%	96.5%
4. Paediatrics		12	3	11	3	9	2	9	2	15	1	15	1	97.2%	100%
5. Anaesthesia		7	1	6	-	8	-	6	-	13	-	9	-	75%	0%
6. Ear , Nose ,Throat		6	-	4	-	6	-	6	-	5	-	3	-	86%	NA
7. Ophthalmology		6	1	4	1	6	-	5	-	6	-	6	-	88%	100%
8. Dermatology		3	-	3	-	7	2	6	2	3	-	3	-	92%	100%
9. Nuclear Medicine		2	-	2	-	1	-	1	-	2	-	1	-	80%	NA
10.Radiation Therapy		1	-	1	-	-	-	2	-	2	-	2	-	100%	NA
11.Forensic Medicine		4	-	3	-	2	-	2	-	4	-	3	-	80%	NA
12.Urology		2	-	2	-	3	-	2	-	4	-	3	-	77%	NA
13. Radiology		6	-	4	-	3	-	3	-	4	2	4	2	84.6%	100%
14. Pathology		-	-	-	-	2	-	2	-	2	1	1	1	75%	100%
15. Psychiatry		3	-	2	-	4	1	3	-	3	-	2	-	70%	0%
16. Family Medicine		-	4	-	4	3	5	3	5	7	11	7	11	100%	100%

(1) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Diploma in Community Medicine (Doctors - 1 year )

Training Institution	Owned By	Intake (I) 2000		Graduates 2001		Intake 2001		Graduates 2002		Intake 2002		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
MOH Directorate of HR	MOH	10	1	10	1	8	3	8	3	12	6	12	6	100%	100%

Notes

(1) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Dentists (5 years)

Training Institution	Owned By	Intake (I) 1996		Graduates 2001		Intake 1997		Graduates 2002		Intake 1998		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
University of Jordan	MOHE:Public	40	36	32	40	35	46	27	42	28	45	33	47	89%	100%
JUST	MOHE:Public	28	27	17	18	23	27	21	20	26	30	13	24	66%	74%
	Parallel	-	-	-	-	33	29	14	18	33	24	15	11	44%	54%

Notes

(1) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Dentists Internship (6 months)

Internship Program first intake 2002

Training Institution	Owned By	Intake (I) 2003		Graduates 2003		Intake 2003		Graduates 2004		Intake 2004		Graduates 2005		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
University of Jordan	MOHE:Public														
MOH Hospitals	MOH	114	62	114	62	10	9	10	9	144	64	144	64	100%	100%
JUST	MOHE:Public														
	RMS														

Notes

(3) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Dental Residency (4 years)

Dental Residency Program first intake in 2001

Training Institution	Owned By	Intake (1) 2001		Graduates 2005		Intake 2002		Graduates 2006		Intake 2003		Graduates 2007		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
MOH Hospitals	MOH					3	1			5	5				
Jordan University Hospital	MOHE:Public														
RMS Hospitals	RMS														

Notes

(1) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### MSc. Health Services Management (2 years)

Training Institution	Owned By	Intake (1) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University of Science and Technology (JUST)	MOHE:Public														

Notes

(3) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Masters Degree in Nursing (2 years)

Training Institution	Owned By	Intake (I) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University	MOHE: Public	7	14	13	16	15	12	13	16	2	19	15	18	170%	161%
Jordan University of Science and Technology	MOHE: Public														

Notes

(3) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

**Students in the Nursing Masters program frequently study on a part-time basis so the relationship between intake and graduation varies greatly.**

### Post Basic Diploma in Nursing (9 months)

Training Institution	Owned By	Intake (I) 2001		Graduates 2002		Intake 2002		Graduates 2003		Intake 2003		Graduates 2004		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Clinical Instructor Program	MOH Last intake 2003	8	7	8	7	7	8	7	8	6	9	6	9	100%	100%
Institute of Specialized Nursing Studies: PHC Nursing	MOH					1	9	1	4	0	11		13	100%	85%
Clinical Care Nursing	MOH First Intake 2005														

Notes

(3) The academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Baccalaureate Nurses (4 years)

Training Institution	Owned By	Intake (1,2) 1997		Graduates 2001		Intake 1998		Graduates 2002		Intake 1999		Graduates 2003		Graduates 2004		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University	MOHE:Public	70	75	72	62	93	71	91	73	91	82	75	80	75	80	94%	94%
JUST	MOHE:Public	J185 N6	J63 N1	J128 N2	J62	J158 N6	J95 N3	J133 N1	J56 N4	J204 N7	J79 N4	J99 N9	J68 N1	174		66%	78%
	Regular	98	-	65	43	78	45	6	35	108	42	69	34				
	Parallel	68	12	31	7	63	21	40	11	83	14	37	10				
	Bridging									11	22	11	22				
Mo'ata Univ. RMS: Princess Muna	MOHE:RMS		50		50		50		50		50		49				99%
Mo'ata Univ. Civilian Kerak	MOHE:Public									36	36	36	36			100%	100%
Hashimieh University	MOHE:Public									36	31	31	28	40	19	86%	90%
Al Al Bayt (First intake 2001)	MOHE:Public																
Total Public Intake	2170 (jordanian)	421	200			392	232			569	356						
Total Public grads (2)	1700 (jordanian)			296	224			270	225			358	327				
Gender Distribution	46% female																
Al Zetuna	MOHE:Private	J58 N10	J19 N1	J29 n5	J7 N1	J84 N5	J20 N2	J58 N7	J19	J140 N15	J24 N2	J82 N5	J20			60%	73%
University of Applied Science	MOHE:Private	J6 N 24	0 N4	J12 N0	J3 N1	J8 N14	J1 4	J3 N1	J1 N1	J8 N11	J1 N3	J3 N1	J1 N1			75%	100%
Total Private Intake		64	19			92	21			148	25						
Total Private Grads (2)	239 (jordanian)			41	11			61	20			85	21				
Gender Distribution	21% female																
Philadelphia First intake 2004	MOHE:Private	No	Grads														

#### Notes

- (1) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.
- (2) Total for intake and graduates include Jordanian nursing students i.e. day, evening and bridging program) and exclude non jordanians
- (3) N= non Jordanian students

### Associate Degree Nurses (2 Years)

Training Institution	Owned By	Intake (I) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Rufaida College	MOH	61				17	79	14	69	33	74	28	67	84%	88.8%
Nusaibeh College	MOH					14	69	12	61	14	69	14	68	92.8%	88.4%
Salt	MOHE:Public							0	0			20	18		
Ajloun	MOHE:Public							0	22			0	36		
Karak	MOHE:Public							0	0			6	24		
RMS/Allied Health College	RMS							47	65			57	68		
Total Graduates Public/RMS								73	217			125	281		
Gender Distribution								25%	75%			31%	69%		
Ma'an Comm College	MOHE: Public							31	10			7	10		
Ibn Khaldoun	MOHE:Private							23	5			21	0		
Zarqa Ahlieh	MOHE:Private							9	11			12	11		
Gharnata	MOHE:Private							32	16			17	12		
Al-Razi	MOHE:Private							0	29			0	19		
Mujtama Islamia	MOHE:Private							0	28			0	23		
Qurdoxa	MOHE:Private							0	31			0	3		
Alrabieh	MOHE:Private							15	13			59	16		
Qudus	MOHE:Private							25	19			29	12		
Jame'aieh Mutuwashteh	MOHE:Private							0	0			40	23		
Khawarzmi	MOHE:Private							18	12			19	9		
Mujtama Arabia	MOHE:Private							22	6			24	17		
Andalus	MOHE:Private							17	10			17	9		
Queen Alia	MOHE:Private							0	24			0	4		
Hetein	MOHE:Private							9	20			14	22		
Qadesia	MOHE:Private							0	25			8	17		
Total Students Private								201	259			267	207		
Gender Distribution								44%	56%			57%	43%		
Grand Total								274	476			392	488		1630

Notes

(3) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

## Associate Degree Midwife

Training Institution	Owned By	Intake 1999 (I)		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduate 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Rufaida College	MOH		61		58		61		53		40		40		93%
Nusaibeh College	MOH						31		31		42		37		92%

(I) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

## MSc. Pharmacy (2 Years)

Training Institution	Owned By	Intake (I) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University	MOHE:Public	4	9	-	-	21	15	10	8	19	18	14	6	60%	42%
Jordan University of Science and Technology	MOHE:Public														

(I) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

## Pharmacists (5 Years)

Training Institution	Owned By	Intake (I) 1996		Graduates 2001		Intake 1997		Graduates 2002		Intake 1998		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University	MOHE:Public	31	67	29	57	24	54	28	56	35	67	30	85	97%	91%
Jordan University of Science and Technology JUST	MOHE:Public	63	76	34	50	42	70	17	48	32	64	18	54	50%	60%
	Parallel	54	44	15	22	72	65	21	29	88	97	34	47	33%	48%
Al-Isra University	MOHE:Private	156	56	-	-	42	35	53	22	65	40	60	30	105%	69%
Al-Ahliyya Amman University	MOHE:Private	65	95	-	-	73	77	53	56	65	70	54	71	78%	86%
Philadelphia University	MOHE:Private	53	53	-	-	31	17	16	14	32	36	30	21	73%	66%
Applied Science Private University	MOHE:Private	27	42	-	-	88	88	55	62	55	52	45	47	70%	76%

(I) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.



### Associate Degree Assistant Pharmacists (2 Years) (Last MOH Intake in 2003)

Training Institution	Owned By	Intake (1) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Yajouz Allied Health Institute	MOH									2	22	2	22	100%	100%
Irbid Allied Health Institute	MOH					3	23	2	23					98%	100%
Private Colleges															
Qudus	MOHE:Private														

(1) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### BSc Laboratory Technician (4 years)

Training Institution	Owned By	Intake (1) 1997		Graduates 2001		Intake 1998		Graduates 2002		Intake 1999		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jordan University for Science and Technology JUST	MOHE:Public	19	33	11	28	14	40	4	25	9	16	5	12	48%	73%
	Parallel	12	13	4	2	9	10	-	1	4	7	-	3		
Hashemieh (Confirm startup date)		-	-	-	-	-	-	-	-	11	25	9	23	81%	92%
Al-Ahliyya Amman University	MOHE:Private	21	18	-	-	3	-	2	4	3	7	2	6	66%	85%
Applied Science Private University	MOHE:Private	48	42	-	-	11	9	11	9	-	6	4	2	100%	73%
Zarqa Private University	MOHE:Private	2	7	2	7	1	11	2	8	3	5	3	4	100%	83%

(1) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Associate Degree: Laboratory Technician (2 Years)

Training Institution	Owned By (1)	Intake (3) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate (2)	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Yajouz Allied Health Institute	MOH									5	17	5	17	100%	100%
Irbid Allied Health Institute	MOH									4	19	4	19	100%	100%
PRIVATE	MOHE														

(1) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Associate Degree: X-Ray Technician (2 Years)

Training Institution	Owned By (1)	Intake (3) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate (2)	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Yajouz Allied Health Institute	MOH					9	7	9	7	8	14	8	12	100%	90.4%
Irbid Allied Health Institute	MOH					17	7	17	7	16	5	16	5	100%	100%

(1) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Associate Degree: Health Inspector (2 Years) (Program temporarily suspended, last intake 2003)

Training Institution	Owned by	Intake (1) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Yajouz Allied Health Institute	MOH					2	10	2	10					100%	100%
Irbid Allied Health Institute	MOH			0		6	13	5	13	5	12	5	12	90.9%	100%
PRIVATE COLLEGES??															

(1) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### BSc Physiotherapy (4 years)

First Intake: 1999

Training Institution	Owned By	Intake (1) 1997		Graduates 2001		Intake 1998		Graduates 2002		Intake 1999		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Hashemieh University started 1999	MOHE:Public									27	22	27	21	100%	95%
Jordan University (Program start up in 1999)	MOHE Public									21	55	20	55	95%	100%
JUST	MOHE:Public	-	-	-	-	-	-	-	-	8	13	6	9	75%	69%
	Parallel									3	3	1	-		

(3) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Associate Degree Physiotherapy (3 Years)

Training Institution	Owned By	Intake (I) 1998		Graduates 2001		Intake 1999		Graduates 2002		Intake 2000		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Yajouz Allied Health Institute	MOH	9	20	9	20	8	16	8	16	6	11	6	11	100%	100%

(I) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### Associate Degree: Anaesthesia Technician (2 Years)

Training Institution	Owned By	Intake (I) 1999		Graduates 2001		Intake 2000		Graduates 2002		Intake 2001		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
Yajouz Allied Health Institute	MOH	14	10	14	10	10	7	10	7	13	12	13	12	100%	100%
Irbid Allied Health Institute	MOH	18	8	17	8	9	10	8	9	10	7	10	7	94.6%	96%

(I) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

### BSc. Dietician ( 4 Years) (please note there was a mistake here with years)

Training Institution	OWNED BY	Intake (I) 1997		Graduates 2001		Intake 1998		Graduates 2002		Intake 1999		Graduates 2003		Graduation Rate	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
JUST	MOHE:Public	26	24	14	28	29	48	14	31	24	46	12	26	51%	72%
	Parallel	14	26	7	14	13	22	3	13	6	11	4	6	42%	56%
Jordan University	MOHE:Public														

(I) The Academic school year spans two calendar years therefore 1999 represents school year 1999-2000; 2000 represents school year 2000-2001 etc.

## ANNEX 6 STUDENT/TEACHER RATIOS BY PROGRAM AND INSTITUTION

**Student/Teacher Ratios by Program and Institution**

Program	Institution	Owned By	Tot. Students 2004	Total FT Teachers 2004 (2)	Students per FT Teacher
Medical (6 years)	Jordan University	MOHE: Public	1057	138	6.76
	JUST	MOHE:Public	1970	128	15.4
	Mo'ta University	MOHE:Public	281	25	11.24
Medical Internship	Al Basheer Hospital	MOH	400		
Medical Residency	MOH Hospitals: w/coordination by Al Basheer (4 years)	MOH	711		
	MOH Hospitals w/coordination by Al Basheer (5 years)	MOH	51		
Diploma in Community Medicine	Directorate of HR	MOH	17		
MSc. In Community Medicine	JUST Jordan University	MOHE:Public			
Dentist	Jordan University	MOHE:Public	653	33	21.32
	JUST	MOHE:Public	688	55	12.5
Dental Internship	MOH		464		
MSc. Dentistry	Jordan University	MOHE:Public			
Dental Residency	MOH Hospitals coordinated by Al Basheer	MOHE:Public	19		
MSc.Health Services Management	JUST	MOHE:Public			
MS Nursing	Jordan University	MOHE:Public	80	37	2.1
	JUST	MOHE:Public	77		
Post Basic Diploma: Nursing	Clinical Instructor	MOH	11	6	1.8
	PHC Nursing	MOH	9	7	1.3
	Critical Care Nsg		12		
BSc. Nursing (including Bridging Students)	Jordan University *	MOHE:Public	1243	34	36.5
	JUST	MOHE:Public	1399	37	38
	Mo'ata Univ. RMS: Princess Muna	RMS	343	11	31.2
	Mo'ata Univ. Kerak	MOHE:Public	281	13	21.6
	Hashimieh University	MOHE:Public	674	18	37.4

### Student/Teacher Ratios by Program and Institution, continued

Program	Institution	Owned By	Tot. Students 2004	Total FT Teachers 2004 (2)	Students per FT Teacher
BSc. Nursing (including Bridging Students), continued	Al Albayt	MOHE:Public	519		
	Al Zetuna	MOHE:Private	1093	32	34
	University of Applied Science	MOHE:Private	248	-	
	Philadelphia (2004-2005)	MOHE:Private	131	6	21.8
Bridging to BSN: See BSc. Nursing	Jordan University	MOHE:Public			
	JUST	MOHE:Public			
	Al Beit	MOHE:Public			
	Al Zetuna	MOHE:Private			
Associate Degree Nursing	Rufaida	MOH	377	26	14.5
	Nusaibeh	MOH	326	14	23
	Salt	MOHE:Public			
	Ajloun	MOHE:Public			
	Karak	MOHE:Public			
	Ma'an	MOHE: Public			
	Ibn Khaldoun	MOHE:Private			
	Zarqa Ahlieh	MOHE:Private			
	Gharnata	MOHE:Private			
	Al-Razi	MOHE:Private			
	Mujtama Islamia	MOHE:Private			
	Qurdova	MOHE:Private			
	Alrabieh	MOHE:Private			
	Qudus	MOHE:Private			
	Jame'aieh Mutuwashteh	MOHE:Private			
	Khawarzmi	MOHE:Private			
	Mujtama Arabia	MOHE:Private			
	Andalus	MOHE:Private			
	Queen Alia	MOHE:Private			
	Hetein	MOHE:Private			
	Qadesia	MOHE:Private			
	RMS Allied College	RMS			
BS Midwifery	JUST	MOHE:Public			
Associates Degree: Midwifery	Rufaida College	MOH	118	5	23.6
	Nusaibeh College	MOH	91	8	11.3
MSc. Pharmacy	Jordan University	MOHE:Public			
	JUST	MOHE:Public			

### Student/Teacher Ratios by Program and Institution, continued

Program	Institution	Owned By	Tot. Students 2004	Total FT Teachers 2004 (2)	Students per FT Teacher
Pharmacist	Jordan University	MOHE:Public	1396	35	39
	JUST	MOHE:Public	1368	28	49
	Al Zetuna	MOHE:Private	464	27	17.2
	University of Applied Science	MOHE:Private	395	15	26.3
	Philadelphia (2004-2005)	MOHE:Private	424	14	30.3
	Isra' University	MOHE:Private	346	20	17.3
	Petra University	MOHE:Private	579	19	30.5
Pharmacist (Dr.)	JUST	MOHE:Public	328		
Assoc. Degree Assist Pharmacist	Yajouz Allied Health	MOH	0		
	Irbid Allied Health	MOH	0		
	Private Colleges (To be determined)				
BSc. Lab Technician	Jordan University	MOHE:Public			
	JUST	MOHE:Public			
	Hashemieh	MOHE:Public	389		
	University of Applied Science	MOHE:Private	2	5	
	Zarqa Ahlyeh	MOHE:Private	86	8	10.8
Associate Degree Lab Technician	Yajouz Allied Health	MOH	0	1	
	Irbid Allied Health	MOH	0	1	
	Private colleges : To be determined				
BSc. X Ray	Hashemieh	MOHE	122	3	40.6
Associate Degree X-Ray Tech	Yajouz Allied Health	MOH	80	1	80
	Irbid Allied Health	MOH	70	1	70
Associate Degree Health Inspector	Yajouz Allied Health	MOH	19	1	19
	Irbid Allied Health	MOH	17	1	17
	Private colleges-to be determined				
BSc. Physiotherapy	Hashemieh University	MOHE:Public	704		
Assoc.Degree: Physiotherapy	Yajouz Allied Health	MOH	53	1	53
	Irbid Allied Health	MOH	0		
Assoc.Degree: Anesthesia	Yajouz Allied Health	MOH	55	2	27.5
	Irbid Allied Health	MOH	52	0	
BSc. Dietician	JUST	MOHE:Public	318	9	35
	Hashemieh	MOHE:Public			
	Jordan University	MOHE:Public			

N.B. University Faculty teach in undergraduate and graduate programs.